

# NI 43-101 TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATE FOR THE AUREUS EAST DEPOSIT, NOVA SCOTIA, CANADA

PREPARED FOR: AURELIUS MINERALS INC. TECHNICAL REPORT DATE: JULY 11, 2022 TECHNICAL REPORT EFFECTIVE DATE: JULY 11, 2022

PREPARED BY: Nordmin Engineering Ltd. **Qualified Person:** Christian Ballard, P. Geo.



## NI 43-101 TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATE

## AUREUS EAST PROJECT NOVA SCOTIA, CANADA

Prepared for:

Aurelius Minerals Inc.



Project # 21186-01

Technical Report Effective Date: July 11, 2022 Mineral Resource Effective Date: May 20, 2022

Prepared by:



Nordmin Engineering Ltd. 160 Logan Ave., Thunder Bay, ON P7A 6R1 Phone: +1 807-683-1730 | Fax: +1 807-683-1744 www.nordmin.com

### **SIGNATURES**

Effective Date: July 11, 2022 Issue Date: July 11, 2022

### **PREPARED AND SIGNED BY**

Christian Ballard, P.Geo., Nordmin Engineering Ltd., Senior Geologist, Geology/Mining

### FORWARD-LOOKING STATEMENTS

This document includes certain "forward-looking information" which is not comprised of historical facts. It is under the provisions of applicable Canadian securities legislation, concerning the business, operations and financial performance and condition of Aurelius. All statements within this Technical Report, other than statements of historical fact, are "forward-looking information" with respect to Aurelius within the meaning of applicable securities laws, including statements with respect to Aurelius Minerals Inc.'s (The Company) future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Forward-looking statements may be identified by such terms as "believes", "anticipates", "expects", "estimates", "may", "could", "would", "if", "yet", "potential", "recommended", "undetermined", "objective", or "plan". Since forward-looking statements are based on assumptions and address future events and conditions, by their very nature they involve inherent risks and uncertainties. Although these statements are based on information currently available to the author, the author provides no assurance that actual results will meet management's expectations. Risks, uncertainties, and other factors involved with forward-looking information could cause actual events, results, performance, prospects, and opportunities to differ materially from those expressed or implied by such forward-looking information. Forward looking information in this Technical Report includes, but is not limited to, the objectives, goals or future plans of the Company, statements, exploration results, potential mineralization, the estimation of mineral resources, and exploration and mine development plans, the timing of the commencement of operations and estimates of market conditions. Factors that could cause actual results to differ materially from such forward-looking statements include, but are not limited changes to long term metal price assumptions; changes to the input values for mining, processing, and general and administrative costs to contrain the estimate; changes to local interpretations of mineralization geometry and continuity of mineralized zones; changes to the density values applied to the mineralized zones; changes to metallurgical recovery assumptions; changes in assumptions of marketability of the final product; variations in geotechnical, hydrogeological, and mining assumptions; changes to assumptions with an existing agreement or new agreements; changes to environmental, permitting; and social license assumptions; EA timing, requirements and supporting documentations; the assumption that the electric power line will be available on time and for the duration of the construction of and the mining of the project; discussions with various First Nations and Indigenous communities; logistics of securing and moving adequate services, labour, and supplies could be affected by epidemics, pandemics, and other public health crises, including COVID-19 or similar such viruses. Although the author believes that the assumptions and factors used in preparing the forward-looking statements in this Technical Report are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this Technical Report, and no assurance can be given that such events will occur in the disclosed time frames or at all. The author disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, other than as required by law.

## TABLE OF CONTENTS

Aurelius Minerals Inc.

1 SUMMARY	
1.1 Principal Outcomes	15
1.2 PROJECT DESCRIPTION, ACCESS AND LOCATION	15
1.3 HISTORY	
1.4 GEOLOGICAL SETTING, MINERALIZATION, AND DEPOSIT TYPES	
1.4.1 DEPOSIT TYPE	
1.5 Exploration	
1.6 Drilling	
1.7 SAMPLE PREPARATION, ANALYSES AND SECURITY	
1.8 DATA VERIFICATION.	
1.9 MINERAL PROCESSING AND METALLURGICAL TESTING	
1.10 Mineral Resource Estimate	
1.11 PERMITTING AND COMPLIANCE ACTIVITIES	
1.12 Risks and Opportunities	
1.13 Conclusions and Recommendations	
2 INTRODUCTION	
2.1 TERMS OF REFERENCE	23
2.2 QUALIFIED PERSONS	23
2.3 EFFECTIVE DATES	25
2.4 INFORMATION SOURCES AND REFERENCES	25
2.5 Previous Reporting	25
2.5.1 Previous Technical Reports	25
2.5.2 Previous Mineral Resource Estimates	25
2.6 ACKNOWLEDGEMENTS	25
2.7 Units of Measure	25
3 RELIANCE ON OTHER EXPERTS	
3.1 MINERAL TENURE, SURFACE RIGHTS, PROPERTY AGREEMENTS, AND ROYALTIES	27
3.2 Environmental, Permitting, and Liability Issues	
4 PROPERTY DESCRIPTION AND LOCATION	
4.1 LOCATION	28
4.2 Mineral Rights	29
4.2.1 ROYALTIES	
4.2.2 PERMITS	
4.2.3 Environmental Regulations	
4.2.4 MINING AND EXPLORATION RIGHTS IN NOVA SCOTIA	
4.3 RISKS AND OTHER FACTORS	
5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY	
5.1 Accessibility	
NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project	Nordmin Engineering Ltd Project # 21186-01

Page 5

5.2 LOCAL RESOURCES AND INFRASTRUCTURE	
5.3 CLIMATE	
5.4 Physiography	
6 HISTORY	
6.1 SUMMARY	
6.2 Exploration and Development	
6.3 HISTORICAL MINERAL RESOURCE ESTIMATES	
6.4 Drilling	
6.5 MINING HISTORY	
7 GEOLOGICAL SETTING AND MINERALIZATION	
7.1 REGIONAL GEOLOGY	
7.2 PROPERTY GEOLOGY	
7.2.1 Structural Geology	
7.2.2 Alteration	
7.2.3 MINERALIZATION	
8 DEPOSIT TYPES	
8.1 TURBIDITE-HOSTED MEGUMA TERRANE GOLD DEPOSITS	
9 EXPLORATION	
9.1 Drill hole and Chip Sampling	48
9.1.1 CHANNEL SAMPLING	
9.2 FIELD WORK	
9.3 GEOCHEMICAL SAMPLING.	
9.4 GEOPHYSICS	
9.4.1 HELICOPTER MAGNETIC AND RADIOMETRIC SURVEYS	
10 DRILLING	
10.1 AUREUS EAST DEPOSIT	
10.1.1 SEABRIGHT EXPLORATION INC./CORNER BAY MINERALS INC.	
10.1.2 DUFFERIN RESOURCES INC.	
10.1.3 Newfoundland Goldbar Resources Inc.	
10.1.4 Azure Resources Corp.	-
10.1.5 2008-2014 RESSOURCES APPALACHES INC	
10.1.6 RESOURCE CAPITAL GOLD CORP.	
10.1.7 Aurelius Minerals Inc.	
10.2 Core Recovery	
10.3 Core Logging	
10.4 Specific Gravity	
10.5 Comments on Section 10	
11 SAMPLE PREPARATION, ANALYSES AND SECURITY	
11.1 Assay Sample Preparation and Analysis	
NI 43-101 Technical Report & Mineral Resource Estimate	Nordmin Engineering Ltd
Aureus East Project	Project # 21186-01
Aurelius Minerals Inc.	Page 6

11.2 Specific Gravity Sampling	
11.3 QUALITY ASSURANCE/QUALITY CONTROL PROGRAMS	
11.3.1 HISTORICAL PROGRAMS	
11.3.1.1 1987-1988 SEABRIGHT	
11.3.1.2 1993-1995 DUFFERIN RESOURCES	
11.3.1.3 1999 Newfoundland Goldbar Resources Inc.	
11.3.1.4 2004 Azure	
11.3.1.5 2008-2014 Ressources Appalaches Inc.	
11.3.1.6 2017 RESOURCE CAPITAL GOLD CORP/MARITIME DUFFERIN	
11.3.2 Aurelius Minerals Inc. 2020-2021	
11.3.2.1 Standards	
11.3.3 Aurelius Minerals Inc. Blanks	
11.3.4 Field and Laboratory Duplicates	
11.3.5 Umpire Checks	
11.4 Sample Security	
11.5 QP's Opinion	
12 DATA VERIFICATION	
12.1 Nordmin Site Visit 2022	
12.1.1 Observations	
12.1.2 Field Collar Validation	
12.1.3 Core Logging, Sampling and Storage Facilities	
12.1.4 INDEPENDENT SAMPLING	
12.2 DATABASE VALIDATION	
12.3 Review of Aurelius QA/QC	
12.4 QP'S OPINION	104
13 MINERAL PROCESSING AND METALLURGICAL TESTING	
13.1 Introduction and Summary	
13.2 1993 Corner Bay Minerals	
13.3 2000-2001 Newfoundland Goldbar Resources	
13.4 2003 Azure Resources	
13.5 2006 Jemma Resources	
13.6 2009-2012 Ressources Appalaches	
13.7 2017-2018 RESOURCE CAPTIAL GOLD CORP	107
14 MINERAL RESOURCE ESTIMATES	
14.1 INTRODUCTION	
14.2 Drill Hole Database	108
14.3 GEOLOGICAL DOMAINING	110
14.4 Exploratory Data Analysis	-
14.5 DATA PREPARATION	121
14.5.1 Non-Sampled Intervals and Minimum Detection Limits	
14.6 Outlier Analysis and Capping	122
14.6.1 Compositing	132
NI 43-101 Technical Report & Mineral Resource Estimate	Nordmin Engineering Ltd
Aureus East Project Aurelius Minerals Inc.	Project # 21186-01 Page 7

	134
14.8 Block Model Mineral Resource Estimation	134
14.8.1 Block Model Strategy and Analysis	134
14.8.2 BLOCK MODEL DEFINITION	135
14.8.3 INTERPOLATION METHOD	135
14.8.4 Search Strategy	135
14.8.5 Assessment of Spatial Grade Continuity	138
14.9 Block Model Validation	140
14.9.1 VISUAL BLOCK MODEL VALIDATION	
14.9.2 Swath Plots	
14.10 INTERPOLATION COMPARISON	
14.11 MINERAL RESOURCE CLASSIFICATION	
14.12 REASONABLE PROSPECTS OF EVENTUAL ECONOMIC EXTRACTION	
14.12.1 Open Pit	
14.12.2 Underground	
14.13 MINERAL RESOURCE ESTIMATE	
14.13.1 Cautionary Statement Regarding Mineral Resource Estimates	
14.14 Grade Distribution Between High grade and Low Grade Background Zones	
14.15 MINERAL RESOURCE SENSITIVITY TO REPORTING CUT-OFF	
14.16 Comparison with the Previous Resource Estimate	
14.17 FACTORS THAT MAY AFFECT THE MINERAL RESOURCES	
14.18 Comments on Section 14	163
15 MINERAL RESERVE ESTIMATE	164
16 MINING METHODS	165
17 RECOVERY METHODS	
18 PROJECT INFRASTRUCTURE	167
19 MARKET STUDIES AND CONTRACTS	168
19 MARKET STODIES AND CONTRACTS	
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT	169
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT	170
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT	170 171
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT 21 CAPITAL AND OPERATING COSTS 22 ECONOMIC ANALYSIS	170 171 172
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT 21 CAPITAL AND OPERATING COSTS 22 ECONOMIC ANALYSIS	170 171 172 173
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT 21 CAPITAL AND OPERATING COSTS 22 ECONOMIC ANALYSIS 23 ADJACENT PROPERTIES 24 OTHER RELEVANT DATA AND INFORMATION	170 171 172 173 174
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT 21 CAPITAL AND OPERATING COSTS 22 ECONOMIC ANALYSIS 23 ADJACENT PROPERTIES 24 OTHER RELEVANT DATA AND INFORMATION 25 INTERPRETATIONS AND CONCLUSIONS	170 171 172 173 174
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT	170 171 172 173 174 174 174
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT	170 171 172 173 174 174 174
20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT	170 171 172 173 174 174 174 174 176 176

25.7 Risks and Uncertainties	
25.8 CONCLUSIONS	177
26 RECOMMENDATIONS	178
26.1 Phase 1 Recommendations	178
26.2 Phase 2 Recommendations	178
26.3 Costs	
26.4 Additional Recommendations	179
27 REFERENCES	180
27 REFERENCES	
28 GLOSSARY	<b>181</b>
28 GLOSSARY	<b>181</b> 181 181
28 GLOSSARY	<b>181</b> 181 181

## LIST OF FIGURES

FIGURE 4-1: AUREUS EAST PROPERTY MAP	28
Figure 4-2: Aureus East Deposit Property Map showing the relative locations of Sheet Harbour and Port Duff Access to the Project is via highway 7	
FIGURE 4-3: Exploration Licenses and Mineral Lease	30
Figure 4-4: Aureus East Deposit Surface Rights Holders	33
Figure 5-1: Aureus East Road Access	34
Figure 5-2: Aureus East Mine	35
FIGURE 7-1: REGIONAL GEOLOGY OF NOVA SCOTIA	42
Figure 7-2: Offsetting Faults	43
Figure 7-3: Geology and Structural Setting	44
FIGURE 8-1: SCHEMATIC OF VEIN-TYPES WITHIN THE PROJECT	47
FIGURE 9-1: AUREUS EAST SURFACE DRILL HOLES WHICH WERE RE-SAMPLED AS A PART OF THE INFILL SAMPLING PROGRAM	49
FIGURE 9-2: CROSS-SECTION LOOKING SOUTHEAST OF UG-17-01 TO UG-17-03	50
FIGURE 9-3: CROSS-SECTION LOOKING SOUTHEAST OF UG-17-04	51
FIGURE 9-4: CROSS-SECTION LOOKING SOUTHEAST OF UG-17-08 TO UG-17-010	52
FIGURE 9-5: CHANNEL SAMPLE TAKEN FROM HISTORIC UNDERGROUND DRIFT	53
Figure 9-6: 985 level Ramp Channel Samples plan view at -15 m above sea level	54
FIGURE 9-7: HORIZONTAL GRADIENT AT THE PROJECT	62
FIGURE 10-1: OVERVIEW OF SURFACE DRILL HOLE COLLARS	67
FIGURE 10-2: SURFACE DRILL PADS AT AUREUS EAST	68
FIGURE 10-3: AUREUS EAST DEPOSIT CROSS SECTION (547890 M E APPROXIMATE CENTER OF SECTION AT AXIS)	69
FIGURE 10-4: AUREUS EAST DEPOSIT CROSS-SECTION SHOWING AE-21-033 AND AE-21-037.	70
FIGURE 10-5: DRY SG MEASUREMENT BEING RECORDED	72
FIGURE 10-6: WET SG MEASUREMENT BEING RECORDED	73
FIGURE 10-7: LOCATION AND SG MEASUREMENT OF SG SAMPLES WITHIN AUREUS EAST	75
FIGURE 10-8: LOCATION AND LITHOLOGY OF SG MEASUREMENTS TAKEN FROM WITHIN AUREUS EAST	76
Figure 11-1: Left-Core sample cut shack; Right-Sample selection throughout $^{\sim}100$ m of core	77
FIGURE 11-2: DEPOSIT STANDARD CDN GS-1U AU (PPM)	80
FIGURE 11-3: DEPOSIT STANDARD OREAS 239 AU (PPM)	81
FIGURE 11-4: DEPOSIT STANDARD OREAS 235 AU (PPM)	81
FIGURE 11-5: DEPOSIT STANDARD OREAS 299 AU (G/T)	82
FIGURE 11-6: DEPOSIT AU (G/T) BLANKS	83
FIGURE 11-7: FIELD DUPLICATES FOR AU (G/T)	84

FIGURE 11-8: ALS LABORATORIES INTERNAL LABORATORY PULP DUPLICATES, AU (G/T)	84
FIGURE 11-9: COARSE STORAGE AREA; CORE STORED IN RACKS	85
FIGURE 11-10: CORE STORAGE AREA, CROSS-PILED ONTO PALLETS	86
FIGURE 11-11: COARSE REJECT STORAGE	86
FIGURE 11-12: COARSE REJECT STORAGE LABELS	87
FIGURE 11-13: PULP STORAGE	87
FIGURE 12-1: CORE SHACK	90
FIGURE 12-2: CORE LOGGING (GREY TRAILER ON RIGHT) AND CORE CUTTING FACILITIES (RED TRAILER ON LEFT)	90
FIGURE 12-3: VANCON CORE CUTTING SAW IN THE CORE CUTTING BUILDING	91
FIGURE 12-4: VEINED/MINERALIZED SADDLE AT THE 1006 LEVEL	92
FIGURE 12-5: MINED OUT PORTION OF BOTH LIMB AT THE 905 LEVEL	92
FIGURE 12-6: OPENED MINERALIZED FOLD LIMB WITH MINERALIZED QUARTZ-CARBONATE VEINING, ARGILLITE, AND ASSOCI ALTERATION BELOW THE 920 LEVEL	
FIGURE 12-7: MINERALIZED ARGILLITE ALONG FOOTWALL CONTACT OF VEINING STRUCTURE	94
FIGURE 12-8: VISIBLE GOLD IN HAND SAMPLE ALONG FOOTWALL CONTACT WITH ARGILLITE	94
FIGURE 12-9: CHANNEL SAMPLE CONTAINING VISIBLE GOLD	95
FIGURE 12-10: COLLAR VALIDATION	96
FIGURE 12-11: TYPICAL FIELD COLLAR SITE	98
FIGURE 12-12: CORE LOGGING STATION	99
FIGURE 12-13: CORE STORAGE FACILITIES	99
FIGURE 12-14: SAMPLES READY FOR SHIPPING	100
FIGURE 12-15: SCATTER PLOT COMPARISON OF INDEPENDENT SAMPLING RESULTS (AU G/T, LOGARITHMIC SCALE)	103
FIGURE 14-1: TERMINOLOGY HIERARCHY	108
FIGURE 14-2: DEPOSIT DRILLING LOOKING NORTH (TOP) AND PLAN VIEW (BOTTOM) SHOWING HISTORIC UNDERGROUND WORK AND OVERBURDEN LAYER.	
FIGURE 14-3: PLAN VIEW OF MINERALIZED DOMAINS SEPARATED BY REGIONAL FAULTS	111
FIGURE 14-4: SIDE VIEW LOOKING NORTH OF THE INDIVIDUAL MINERALIZED ZONES SEPARATED BY REGIONAL FAULTS	112
FIGURE 14-5: REPRESENTATIVE VERTICAL SECTION ACROSS DOMAIN 6 SHOWING INDIVIDUAL MINERALIZED ZONES FOLLOWING CROWN RESERVE ANTICLINE TREND.	
FIGURE 14-6: AU DISTRIBUTION FOR SAMPLES WITHIN DOMAIN 2 AT THE AUREUS EAST DEPOSIT	119
FIGURE 14-7: AU DISTRIBUTION FOR SAMPLES WITHIN DOMAIN 3 AT THE AUREUS EAST DEPOSIT	119
FIGURE 14-8: AU DISTRIBUTION FOR SAMPLES WITHIN DOMAIN 4 AT THE AUREUS EAST DEPOSIT	120
FIGURE 14-9: AU DISTRIBUTION FOR SAMPLES WITHIN DOMAIN 5 AT THE AUREUS EAST DEPOSIT	120
FIGURE 14-10: AU DISTRIBUTION FOR SAMPLES WITHIN DOMAIN 6 AT THE AUREUS EAST DEPOSIT	121
FIGURE 14-11: UNCAPPED AU (G/T) SAMPLE DISTRIBUTION OF ZONE 2027	122

FIGURE 14-12: (TOP) UNCAPPED AU SAMPLE DISTRIBUTION OF ZONE 3002 WITH MAX AU VALUE OF 286.8 G/T AND CV OF 3.78. (BOTTOM) CAPPED AU SAMPLE DISTRIBUTION OF ZONE 3002 WITH CAPPED AU VALUE OF 150 G/T AND CV OF 3.26 ...... 123 FIGURE 14-13: (TOP) UNCAPPED AU SAMPLE DISTRIBUTION OF ZONE 4008 WITH MAX AU VALUE OF 46.7 G/T AND CV OF 4.06. (BOTTOM) CAPPED AU SAMPLE DISTRIBUTION OF ZONE 4008 WITH CAPPED AU VALUE OF 30.0 G/T AND CV OF 3.20 ...... 124 FIGURE 14-14: (TOP) UNCAPPED AU SAMPLE DISTRIBUTION OF ZONE 5004 WITH MAX AU VALUE OF 110 G/T AND CV OF 4.13. (BOTTOM) CAPPED AU SAMPLE DISTRIBUTION OF ZONE 5004 WITH CAPPED AU VALUE OF 60.0 G/T AND CV OF 3.36 ...... 125 FIGURE 14-15: (TOP) UNCAPPED AU SAMPLE DISTRIBUTION OF ZONE 6001 WITH MAX AU VALUE OF 350 G/T AND CV OF 3.89. (BOTTOM) CAPPED AU SAMPLE DISTRIBUTION OF ZONE 6001 WITH CAPPED AU VALUE OF 175 G/T AND CV OF 3.41 ...... 126 FIGURE 14-16: CROSS SECTION, BLOCK MODEL VALIDATION DISPLAYING BLOCK MODEL AND CAPPED COMPOSITES IN DOMAIN 2. 141 FIGURE 14-17: CROSS SECTION, BLOCK MODEL VALIDATION DISPLAYING BLOCK MODEL AND CAPPED COMPOSITES IN DOMAIN 3. 142 FIGURE 14-18: CROSS SECTION, BLOCK MODEL VALIDATION DISPLAYING BLOCK MODEL AND CAPPED COMPOSITES IN DOMAIN 4. 143 FIGURE 14-19: CROSS SECTION, BLOCK MODEL VALIDATION DISPLAYING BLOCK MODEL AND CAPPED COMPOSITES IN DOMAIN 5. 144 FIGURE 14-20: CROSS SECTION, BLOCK MODEL VALIDATION DISPLAYING BLOCK MODEL AND CAPPED COMPOSITES IN DOMAIN 6. 145 FIGURE 14-21: CROSS SECTION, BLOCK MODEL VALIDATION DISPLAYING BLOCK MODEL AND CAPPED COMPOSITES IN DOMAIN 6. 146 

## LIST OF TABLES

TABLE 1-1: EXPLORATION LICENCES AND MINERAL LEASE AT AUREUS EAST	16
TABLE 1-2: MINERAL RESOURCE ESTIMATE, OPEN PIT (0.44 G/T CUT-OFF) AND UNDERGROUND (2.40 G/T CUT-OFF)	20
TABLE 1-3: RECOMMENDED PHASE 1 AND 2 PROGRAMS WITH ESTIMATED COSTS (WITH 15% CONTINGENCY)	22
TABLE 2-1: QP- SECTION RESPONSIBILITY	24
TABLE 4-1: EXPLORATION LICENCES AND MINERAL LEASE AT AUREUS EAST	31
TABLE 6-1-: CHAIN OF OWNERSHIP OF THE PROJECT	37
TABLE 6-2-: SUMMARY OF EXPLORATION AND DEVELOPMENT HISTORY ON THE PROJECT	38
TABLE 6-3-: SUMMARY OF DRILLING HISTORY	39
TABLE 6-4: EXTRACTION HISTORY	40
TABLE 9-1: SUMMARY OF CHANNEL SAMPLING AT THE 985 RAMP LOCATION	55
TABLE 9-2: SUMMARY OF CHANNEL SAMPLING AT 940 EAST LOCATION	56
TABLE 9-3: SUMMARY OF CHANNEL SAMPLING AT 940 RAMP LOCATION	57
Table 9-4: Summary of channel sampling at 944 Level location	58
TABLE 9-5: SUMMARY OF FIELD SAMPLES COLLECTED DURING THE 2020-2021 FIELD PROGRAMS	60
TABLE 9-6: GEOPHYSICAL STUDY FLIGHT LINE SUMMARY	61
TABLE 10-1: AUREUS EAST DRILL HOLE SUMMARY	63
TABLE 10-2: AVERAGE SG MEASUREMENTS FOR LITHOLOGIES WITHIN AUREUS EAST	74
TABLE 11-1: CRM RESULT SUMMARY	80
TABLE 12-1: DRILL COLLAR COORDINATE VALIDATION	97
Table 12-2: Independent Sampling	101
	110
TABLE 14-1 SUMMARY OF SAMPLES FROM DIAMOND DRILLING AND CHIP SAMPLING	
TABLE 14-1 SUMMARY OF SAMPLES FROM DIAMOND DRILLING AND CHIP SAMPLING         TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2	
	114
TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2	114 115
TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2         TABLE 14-3: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 3	114 115 116
TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2         TABLE 14-3: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 3         TABLE 14-4: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 4	114 115 116 117
TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2         TABLE 14-3: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 3         TABLE 14-4: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 4         TABLE 14-5: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 5	114 115 116 117 118
TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2         TABLE 14-3: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 3         TABLE 14-4: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 4         TABLE 14-5: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 5         TABLE 14-6: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 6	114 115 116 117 118 122
TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2         TABLE 14-3: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 3         TABLE 14-4: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 4         TABLE 14-5: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 5         TABLE 14-6: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 6         TABLE 14-7: ASSAYS AT MINIMUM DETECTION	114 115 116 117 118 122 127
TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2         TABLE 14-3: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 3         TABLE 14-4: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 4         TABLE 14-5: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 5         TABLE 14-6: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 6         TABLE 14-7: ASSAYS AT MINIMUM DETECTION         TABLE 14-8: OUTLIER ANALYSIS AND CAPPING, DOMAIN 2	114 115 116 117 118 122 127 128
TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2         TABLE 14-3: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 3         TABLE 14-4: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 4         TABLE 14-5: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 5         TABLE 14-6: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 6         TABLE 14-7: ASSAYS AT MINIMUM DETECTION         TABLE 14-8: OUTLIER ANALYSIS AND CAPPING, DOMAIN 2         TABLE 14-9: OUTLIER ANALYSIS AND CAPPING, DOMAIN 3	114 115 116 117 118 122 127 128 129
TABLE 14-2: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 2         TABLE 14-3: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 3         TABLE 14-4: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 4         TABLE 14-5: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 5         TABLE 14-6: DESCRIPTIVE STATISTICS SUMMARY, DOMAIN 6         TABLE 14-7: ASSAYS AT MINIMUM DETECTION         TABLE 14-8: OUTLIER ANALYSIS AND CAPPING, DOMAIN 2         TABLE 14-9: OUTLIER ANALYSIS AND CAPPING, DOMAIN 3         TABLE 14-10: OUTLIER ANALYSIS AND CAPPING, DOMAIN 4	114 115 116 117 118 122 127 128 129 130

TABLE 14-14: SPECIFIC GRAVITY ASSIGNMENT	134
TABLE 14-15: BLOCK MODEL DEFINITION	135
TABLE 14-16: SEARCH PARAMETERS	137
TABLE 14-17: VARIOGRAPHY PARAMETERS	139
TABLE 14-18: OPEN PIT LIMIT ANALYSIS PARAMETERS	157
TABLE 14-19: UNDERGROUND LIMIT ANALYSIS PARAMETERS	158
TABLE 14-20: MINERAL RESOURCE ESTIMATE, OPEN PIT (0.44 G/T CUT-OFF) AND UNDERGROUND (2.40 G/T CUT-OFF)	159
TABLE 14-21: MINERAL RESOURCE SENSITIVITY TO REPORTING CUT-OFF, OPEN PIT	161
TABLE 14-22: MINERAL RESOURCE SENSITIVITY TO REPORTING CUT-OFF, UNDERGROUND	162
TABLE 26-1: RECOMMENDED PHASE 1 AND 2 PROGRAMS WITH ESTIMATED COSTS (WITH 15% CONTINGENCY)	179

#### **1 SUMMARY**

Nordmin Engineering Ltd. ("Nordmin") was retained by Aurelius Minerals Inc. ("Aurelius" or the "Company") to prepare a Canadian National Instrument 43-101 ("NI 43-101") Technical Report ("Technical Report") and Mineral Resource Estimate ("MRE") on the Aureus East Project (the "Project") located approximately 140 km northeast of Halifax, Nova Scotia, Canada.

#### **1.1 PRINCIPAL OUTCOMES**

This Technical Report supports the disclosure of Mineral Resources for the Project in a Company news release of May 25, 2022 entitled "Aurelius Announces Maiden Mineral Resource Estimate at Aureus East".

All measurement units used in this Technical Report are metric unless otherwise noted. Currency is expressed in Canadian (CAD) dollars (C\$). The Technical Report uses Canadian English.

The MRE for the Project conforms to industry best practices and is reported using the 2014 CIM Definition Standard for Mineral Resources and Mineral Reserves and 2019 CIM Best Practice Guidelines. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. This estimate of Mineral Resources may be materially affected by environmental permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.

Mineral Resources were classified into Indicated and Inferred categories based on geological and grade continuity, in conjunction with data quality, spatial continuity based on variography, estimation pass, data density, and block model representativeness, specifically assay spacing and abundance, kriging variance, and search volume block estimation assignment.

#### **1.2 PROJECT DESCRIPTION, ACCESS AND LOCATION**

The Aureus East Deposit (the "Deposit") is situated on the Eastern Shore of Halifax County in Nova Scotia, Canada. It is approximately 140 km from Halifax by paved Highway 7 and 8 km north of Port Dufferin. The approximate centre point is at 44° 58' 33" North Latitude and 62° 22' 30" West Longitude on NTS map-sheet 11D/16C. The UTM coordinates are 4,980,500 N and 549,325 E using UTM North American Datum 1983 ("NAD83") Zone 20N. Surface rights for the portion of the mine infrastructure are fully owned by Aurelius Minerals Inc. The portal for the decline lies on Crown Land that is leased by Aureus Gold Inc. ("Aureus"), a fully-owned subsidiary of Aurelius.

The Project is 1,069 ha in area and consists of three contiguous exploration licences and one mineral lease (Table 1-1). The Exploration Licences consist of 52 claims for a total of 2,080 acres or 842 ha. The Mineral Lease consists of 14 claims. The mineral lease and claims boundaries have not been surveyed. Nova Scotia uses a map staking system whereby the province is divided into latitude-longitude-defined, regular grid of claims of approximate 40 acres each. Unless a dispute arises, it is not normally required to physically survey or mark claim boundaries.

License Number	Property	Claims	Tracts	NTS Map	Issue Date	Expiry Date
EL07351	Aureus East	Ν	77	11D/16C	2007-05-17	2023-05-17
		NOPQ	78			
		JKPQ	90			
		ABCFGHJKLMNOPQ	91			
		DEMN	92			
EL08619	Aureus East	LOP	80		2009-05-20	2023-05-20
		BCFGHJ	89	11D/16C		
		EFLM	90			
EL50783 Aureus East		ABCFGHJKLOPQ	92	11D/16C	2015-11-17	2023-11-17
	Aureus East	NOPQ	79	-		
MLE51383		Q	80		2017-05-01	2037-05-01
		А	89	11D/16C		
		ABCDGHI	90			
		DE	91			

Table 1-1: Exploration Licences and Mineral Lease at Aureus East

The portion of the Project comprising Exploration Licences 50783, 08619, and 07351 is subject to a 1% NSR beginning on the 5<sup>th</sup> anniversary of Friday October 7, 2016, the closing date of a previous purchase of the Project. This royalty was assigned to and is now held by Metalla Royalty & Streaming Ltd.

The Company is not aware of any other specific risks or factors that could affect the claim position, the private Property ownership, or the permitting of the Project.

#### 1.3 HISTORY

The first discovery of gold in the area was reported near Port Dufferin in 1868. Mineral exploration and mining activity continued periodically through the end of the 1800s and into the 1930s. Efforts largely consisted of small pits and short shallow shafts and drifts for test milling. Modern exploration began in the early 1980s and has continued until today. The Property has changed hands many times through the 1990s to the 2000s.

In July 2019, Resource Capital Gold Corp., the owner of the Property at the time, went into receivership and ownership of the Property passed to 2672403 Ontario Ltd., a wholly owned subsidiary of Sprott Resource Lending Corp. from whom Resource Capital Gold Corp. had obtained a loan.

In February 2020, the Company acquired 2672403 Ontario Ltd. from Sprott Resource Lending Corp. On May 29<sup>th</sup>, 2020, the Company changed the name of 2672403 Ontario Ltd. to Aureus Gold Inc.

From 1995-2018 a total of 174,049 tonnes have been mined by various operators within the Property at head grades ranging from 1.1 g/ to 4.4 g/t Au.

#### 1.4 GEOLOGICAL SETTING, MINERALIZATION, AND DEPOSIT TYPES

The Property lies within the Meguma Terrane which covers most of the southern half of Nova Scotia. It is the principal host of gold deposits in Nova Scotia. The Meguma Terrane, the principal host of gold deposits in Nova Scotia, is a package of Lower Paleozoic age metamorphosed, turbiditic, deep-water, clastic sedimentary rocks. During the Acadian Orogeny, these rocks were deformed into east-trending folds and regionally metamorphosed

to greenschist, and locally amphibolite, grade facies. During the Devonian, the Meguma Terrane was intruded by voluminous granitoid batholiths. The Property is located within the Meguma Structural Terrane.

The Meguma Supergroup is comprised of the lower Goldenville Group comprised predominantly of metagreywacke and with a known thickness of at least 6.7 km, and the upper Halifax Group, at least 11.8 km in thickness and comprised predominantly of black slate.

The Deposit is underlain by greywacke with minor interbedded argillite of the Goldenville Formation, and black, graphitic slate of the Halifax Formation. These formations are folded into a series of gently east-plunging and upright anticlines & synclines.

Gold mineralization at the Deposit is hosted by saddle-reef quartz veins. The veins are sub-horizontal and stacked one above the other with 20 to 40 m spacing.

#### 1.4.1 DEPOSIT TYPE

The turbidite-hosted gold deposits of Nova Scotia have been compared to similar-age turbidite-hosted quartz vein deposits elsewhere in the world, particularly those in the Bendigo and Ballarat areas in the state of Victoria, Australia, and have historically been similarly classified. Turbidite-hosted Meguma Terrane gold deposits are a sub-type of orogenic gold deposits. Orogenic gold deposits form during or soon after peak metamorphism in collisional metamorphic Terranes of all ages. These deposits exhibit strong structural control in brittle faults and ductile shear zones as quartz-dominated stockworks, breccias, laminated veins, vein arrays, replacements, and disseminations. Most deposits of this style formed under greenschist facies metamorphic conditions (250 - 350 °C, 1 to 3 kbar, 2 to 20 km deep) in compressional or transpressional settings.

The Deposit is synonymous with the Project, and is an orogenic, turbidite hosted quartz-carbonate vein deposit as it is hosted within a series of argillites and greywacke metamorphosed to, typically, greenschist facies. This type of deposit is also known as a Saddle Reef deposit and can be found only in a few locations globally. The deposit type is often characterized by the formation of gold bearing quartz veins within the argillite unit, commonly referred to as mineralized belts.

#### **1.5 EXPLORATION**

During 2020-2021, the Company completed field work on Exploration licenses 08619, 50783 and Mineral Lease 51383. This was initially carried out as prospecting along old logging roads and paths to gauge accessibility. Limited mapping and sampling was completed due to lack of outcrop exposure. Throughout this field season, 11 samples were collected throughout the Project composed of float, subcrop, and outcrop. No geochemical sampling has been completed.

In July 2021, SHA Geophysics of Toronto, ON completed a helicopter borne high-resolution tri-axial aeromagnetic survey. The helicopter flew at an average height of 30 m with a line spacing of 75 m. A total of 445 line km of data was collected across the Project. Magnetic anomalies produced from this survey were used to identify drilling targets in the 2021 drilling program.

#### 1.6 DRILLING

Historically, between 1987-2018, 180 diamond drill holes totaling 22,489 m has been drilled throughout the Property. Aurelius has currently completed diamond drilling in 49 drill holes totaling 21,082 m as a part of it's Phase 1 and Phase 2 drilling programs throughout 2020-2021. The Company has completed an additional 249.6 m of channel sampling, and some field work on exploration licenses. Phases 1 and 2 of drilling were very successful,

yielding some significant gold grades, and a third phase of drilling is currently being planned. Field work including mapping and sample collection has been conducted on Aurelius' three contiguous exploration licenses and its Mineral Exploration License.

#### 1.7 SAMPLE PREPARATION, ANALYSES AND SECURITY

Drill holes from programs completed between 1987 and 2021 are included in the current MRE database. The sampling approaches in programs carried out prior to 2005 generally reflect sampling of visibly determined mineralized belts, respective of major geological units, plus varying amounts of adjacent material. Exceptions to this, which include continuous core sampling and/or total core rather than half core sampling, pertain to certain historical metallurgical programs.

Drill core samples from surface (HQ core) and underground (NQ core) programs carried out from 2020 to 2021 were generated by Major Drilling. Sampling was continuous, respective of major lithologic units and ranged in length from 0.3 to 1.0 m depending on veining and mineralization within samples, best geologic contacts were honoured. One blank, one standard and one duplicate were inserted in every batch of fifty samples. All samples were sent to ALS Moncton, NB, in rice bags batched with 5 to 15 samples. Analysis was completed via 50 g fire assay with an AAS finish. Samples which assayed over 100 g/t Au were re-assayed with a gravimetric finish. No multi-element ICP has been completed.

Sample bags are all sealed with zip ties to ensure sample integrity and to be securely shipped for analytical analysis. Drill core is stored in outdoor core racks or cross-piled at the Project site.

It is the opinion of the QP that the sample preparation, security, and analytical procedures used by all parties are consistent with standard industry practices and that the data is suitable for the 2022 MRE.

#### **1.8 DATA VERIFICATION**

Core sample records, lithologic logs, laboratory reports and associated drill hole information for all drill programs completed between 1987 and 2021 were digitally compiled for use in Leapfrog Geo<sup>™</sup> and Datamine Studio RM<sup>™</sup> to produce a geologic model and a MRE. Historical and current drilling program information was reviewed.

From 1987 to present, all drill hole data was imported into MX Deposit which was be exported via Microsoft Excel®

The QP completed a spot check verification on the project for:

- 5 drill holes including all main lithologies, 33 geotechnical measurements, and 8% of the assays.
- No channel samples were reviewed

The geology was validated by comparing lithologic units from MX Deposit with stored half core and are acceptable for use.

#### **1.9 MINERAL PROCESSING AND METALLURGICAL TESTING**

Currently, no metallurgical testing has been completed on the Project by the Company.

#### **1.10 MINERAL RESOURCE ESTIMATE**

The MRE presented in this report is the maiden MRE for the Project which has been prepared in accordance with NI 43-101 standards. The MRE was estimated from the main database comprised of 43,571 m of diamond drilling consisting of 229 drill holes completed between 1987 and the effective date of May 20, 2022. Additionally, 17 channels, 131 individual samples, comprising 67.1 m from 985 Ramp were included in the estimate. The Deposit NI 43-101 Technical Report & Mineral Resource Estimate Nordmin Engineering Ltd Aureus East Project Project 21186-01 Aurelius Minerals Inc.

is a series of folded, gently east-plunging upright anticlines and synclines. To model the complex geometry of the mineralized belts, detailed implicit wireframing was completed using Leapfrog Geo<sup>™</sup>. A low grade background shape was created for each of the 5 domains which were truncated by the 4 major faults transecting the Deposit. This wireframing was reviewed by Nordmin to confirm geological reasoning and to verify the wireframes. Assays were manually flagged to wireframes to ensure no assays were overlooked and that appropriate grade was assigned to the individual mineralized zones.

Block models were defined with parent blocks at 2.0 m x 2.0 m x 2.0 m (Northing x Easting x Elevation).

All wireframe volumes were filled with blocks from the prototype (which used the parameters in Table 14-15). Block volumes were compared to the wireframe volumes to confirm there were no significant differences. Block volumes for all wireframes were found to be within reasonable tolerance limits. Sub-blocking was allowed to maintain the geological interpretation and to accommodate the high grade and low grade zone wireframes, the SG, and the category application. Sub-blocking has been allowed to the following minimums:

• 2.0 m x 2.0 m x 2.0 m blocks are sub-blocked three-fold to 0.25 m x 0.25 m in the N-S and E-W directions with a variable elevation calculated based on the other sizes.

The MRE was conducted using Datamine Studio RM<sup>™</sup> version 1.11.300.0 within NAD83 UTM Zone 20N.

Five block models were independently estimated, one each for Domains 2 through 6. These block models had extraneous fields removed and were combined into one overall resource block model.

The Mineral Resources were classified using the 2014 CIM Definition Standards and the 2019 CIM Best Practice Guidelines and have an effective date of May 20, 2022, 2022. The Project Hosts:

- Total Open Pit (at a 0.44 g/t cut-off) and Underground (at a 2.4 g/t cut-off) Mineral Resources include 985.4 thousand tonnes and 162.7 thousand ounces of Indicated Mineral Resources grading 5.14 g/t gold, and 4,185.3 thousand tonnes and 387.6 thousand ounces of Inferred Resources grading 2.88 g/t gold.
- Open Pit Mineral Resources include 653.7 thousand tonnes and 78.0 thousand ounces of Indicated Mineral Resources grading 3.71 g/t gold, and 2,557.4 thousand tonnes and 147.2 thousand ounces of Inferred Resources grading 1.79 g/t gold.
- Underground Mineral Resources include 331.7 thousand tonnes and 84.7 thousand ounces of Indicated Mineral Resources grading 7.94 g/t gold, and 1,628 thousand tonnes and 240.4 thousand ounces of Inferred Resources grading 4.59 g/t gold.

Table 1-2 is based on validated results of 229 surface and underground diamond drill holes, for a total of 43,571 m as well as 131 samples totaling 67.1 m and an effective date of May 20, 2022.

Resource Type	Gold Cut- off (g/t)	Category	Tonnes (x 1,000)	Gold Grade (g/t)	Gold Troy Ounces (x 1,000)
Open Pit	0.44	Indicated	653.7	3.71	78.0
Open Pit	0.44	Inferred	2,557.4	1.79	147.2
Underground 2.40	2 40	Indicated	331.7	7.94	84.7
	2.40	Inferred	1,628.0	4.59	240.4
Combined Open Pit	0.44/ 2.40	Indicated	985.4	5.14	162.7
and Underground		Inferred	4,185.3	2.88	387.6

Table 1-2: Mineral Resource Estimate, Open Pit (0.44 g/t Cut-off) and Underground (2.40 g/t Cut-off)

Source: Nordmin 2022

\* Combined Open Pit and Underground Mineral Resources; The Open Pit Mineral Resource is based on a 0.44 g/t gold CoG, and the Underground Mineral Resource is based on 2.4 g/t gold CoG.

#### **Mineral Resource Estimate Notes**

- Mineral Resources were prepared in accordance with NI 43-101 and the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2019). Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. This estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
- Open Pit Mineral Resources are reported at a CoG of 0.44 g/t gold that is based on a gold price of US\$1,700/oz (approximately CAD\$2,267/oz) and a gold processing recovery factor of 96%.
- Underground Mineral Resource is reported at a CoG of 2.40 g/t gold that is based on a gold price of US\$1,700/oz (approximately CAD\$2,267/oz) and a gold processing recovery factor of 97%.
- Assays were variably capped on a wireframe-by-wireframe basis (Table 14-8 and Table 14-12).
- SG was applied as follows:
  - Mineralized belt Zone wireframes were assigned a weighted average SG of 2.770
  - Low grade background Zone wireframes were assigned a weighted average SG of 2.723
- Mineral Resource effective date May 20, 2022.
- All figures are rounded to reflect the relative accuracy of the estimates and totals may not add correctly.
- Excludes all mined out and unclassified mineralization located within block model.
- Reported from within a mineralization envelope accounting for mineral continuity.

#### **1.11 PERMITTING AND COMPLIANCE ACTIVITIES**

There is infrastructure on site that existed when the Company took ownership of the Project. The presence of past mining infrastructure, including several historic tailings ponds, are recognized as important environmental site factors.

The Project has had Industrial Approvals ("IA") issued to previous owners and the Company continues to abide by the criteria set out in the most recent IA where applicable. Examples of ongoing environmental monitoring at the

site include: quarterly surface water and ground water monitoring, weekly tailings management facility monitoring, and monitoring of effluent from the underground workings dewatering system.

Permitting and approval of mining projects is coordinated between the municipal, provincial, and federal regulatory agencies, along with systematic community and indigenous consultation. As is the case for similar mine developments in Canada, the Project is subject to federal and provincial environmental assessment processes. Due to the complexity and size of such projects, various federal and provincial agencies have jurisdiction to provide authorizations or permits that would enable the Project construction to proceed. Federal agencies that have significant regulatory involvement include the Canadian Environmental Assessment Agency, Environment and Climate Change Canada, Natural Resources Canada, and DFO. Surface rights for the portion of the Project containing the site and the historic underground workings are held by the Company and the Government of Nova Scotia. Surface rights of areas outside the site are held by private landowners and the Government of Nova Scotia.

#### **1.12 RISKS AND OPPORTUNITIES**

There are inherent risks for any mining project like Aureus East, including:

- Changes to long term metal price assumptions.
- Changes to the input values for mining, processing, and general and administrative costs to constrain the estimate.
- Changes to local interpretations of mineralization geometry and continuity of mineralized zones.
- Changes to the density values applied to the mineralized zones.
- Changes to metallurgical recovery assumptions.
- Changes in assumptions of marketability of the final product.
- Variations in geotechnical, hydrogeological, and mining assumptions.
- Changes to assumptions with an existing agreement or new agreements.
- Changes to environmental, permitting, and social license assumptions.
- EA Timing, requirements and supporting documentation.
- The assumption that the electric power line will be available on time for the construction of the project.
- Discussions with various First Nation and Indigenous communities.
- Logistics of securing and moving adequate services, labour and supplies could be affected by epidemics, pandemics and other public health crises, including COVID-19 or similar such viruses.

#### **1.13 CONCLUSIONS AND RECOMMENDATIONS**

The Company should continue exploration activities designed to increase diamond drilling density, particularly targeting mineralized fold limbs and the hinge areas within and below the optimized open pit shell. Currently, the Company is continuing channel sampling efforts in historic underground workings. Due to the focus on open-pit mining methods there are no plans to complete any future work, channel sampling or drilling, from underground headings. The author recommends a 2 phase diamond drilling program with Phase 2 being contingent on positive economic results from Phase 1 (Table 1-3).

Phase 1 can be summarized as:

- Continued drilling in optimized pit area at the Aureus East Deposit for the purpose of infill, testing potential additional mineralized limbs, and drilling transition areas from hinge to limbs.
- 60-70 drill holes with maximum depths of 150 m
- Re-sampling of historic drill core from the pit area

• Total cost of ~\$3,550,000 with a 15% contingency

Phase 2 is contingent on results of Phase 1 and is designed for further economic advancement of ongoing drilling and technical programs; it can be summarized as follows:

- Additional diamond drilling from surface targeting high grade areas below the optimized pit.
- Total cost of ~\$3,000,000 with a 15% contingency

The Company believes there is further potential to expand the Deposit at depth based on recent 2020-2021 drill program results. Additional drilling and historic drill core re-sampling will help to test mineralization continuity across the limbs and upgrade inferred to Indicated Mineral Resources.

Phase	Item Description				
	Drilling	Approximately 60-70 150 m holes within optimized pit area	3,000,000		
Phase 1	Relogging/resampling of historical drill coreVerification and supplementation of geological data; sampling within pit area5				
	Phase 1 Subtotal		3,550,000		
Dhase 2	Drilling	Additional drilling to target below pit area	3,000,000		
Phase 2	Phase 2 Subtotal				
All Phases	Total		6,550,000		

Table 1-3: Recommended Phase 1 and 2 Programs with Estimated Costs (with 15% contingency)

Source: Nordmin, 2022

#### **2 INTRODUCTION**

#### 2.1 TERMS OF REFERENCE

This Technical Report was prepared in accordance with disclosure and reporting requirements set forth in the Canadian Securities Administrations' National Instrument 43-101 "Standards of Disclosure for Mineral Projects" ("NI 43-101") for Aurelius Minerals Inc. (and subsidiary Aureus Gold Inc.) by Nordmin Engineering Inc. on the Aureus East Project.

Aureus Gold Inc. is a fully owned subsidiary of Aurelius Minerals Inc., and is how the Company is internally referred to in the province of Nova Scotia. Aurelius Minerals Inc. is a Canadian mineral exploration and development company incorporated in 2007 (as Galena International Resources; name changed in 2017) and is based in Toronto, Ontario, Canada.

The Technical Report is effective as of July 11, 2022. This Technical Report supersedes all prior technical reports prepared for the Project and was created for the purpose of defining a mineral resource estimate prepared in accordance with NI 43-101 within the Aureus East Project located in Nova Scotia, Canada.

Aurelius Minerals Inc. is a public company listed on the TSX Venture Exchange, with their corporate office located at:

110 Yonge Street, Suite 1900 Toronto, ON M5C 1T4 Canada

This Technical Report provides a MRE and a classification of the Mineral Resource prepared in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves: Definitions and Guidelines, May 10, 2014 (CIM, 2014) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2019; 2019 CIM Best Practice Guidelines).

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

#### 2.2 QUALIFIED PERSONS

The QP preparing this Technical Report is a specialist in the fields of geology, exploration, and Mineral Resource Estimation and classification.

Mr. Christian Ballard, P.Geo., performed an inspection of the Property. This included:

- Review of the geological and geographical setting of the Project.
- Review and inspection of the site geology, mineralization, and structural controls on mineralization.
- Review of the drilling, logging, sampling, analytical and QA/QC procedures.
- Review of the chain of custody of samples from the field to the assay lab.
- Review of the drill logs, drill core, storage facilities, and independent assay verification on selected core samples.
- Confirmation of several drill hole collar locations.
- Review of the structural measurements recorded within the drill logs and how they are utilized within the 3D structural model.
- Validation of a representative portion of the drill hole database.

The QP employed in the preparation of this Technical Report is not an insider, associate, affiliate, or has any beneficial interest in Aurelius Minerals Inc. The results of this Technical Report are not dependent upon any prior agreements concerning the conclusions to be reached between Aurelius and the QP. The QP is being paid a fee for the work in accordance with reasonable professional consulting practices.

This Technical Report was prepared by Mr. Christian Ballard, P.Geo. who by virtue of education, experience, and professional association, is considered a QP as defined in the NI 43-101 standard, for this Technical Report, and is a member in good standing of a relevant professional institution. The QP Certificate of the Author is provided in Appendix A of this Technical Report.

The responsibilities for each section are indicated in Table 2-1.

Section and Title	QP	Company
1: Summary	Christian Ballard, P.Geo	Nordmin
2: Introduction	Christian Ballard, P.Geo	Nordmin
3: Reliance on Other Experts	Christian Ballard, P.Geo	Nordmin
4: Property Description and Location	Christian Ballard, P.Geo	Nordmin
5: Accessibility, Climate, Local Resources, Infrastructure, and Physiography	Christian Ballard, P.Geo	Nordmin
6: History	Christian Ballard, P.Geo	Nordmin
7: Geological Setting and Mineralization	Christian Ballard, P.Geo	Nordmin
8: Deposit Types	Christian Ballard, P.Geo	Nordmin
9: Exploration	Christian Ballard, P.Geo	Nordmin
10: Drilling	Christian Ballard, P.Geo	Nordmin
11: Sample Preparation, Analyses, and Security	Christian Ballard, P.Geo	Nordmin
12: Data Verification	Christian Ballard, P.Geo	Nordmin
13: Mineral Processing and Metallurgical Testing	Christian Ballard, P.Geo	Nordmin
14: Mineral Resource Estimate	Christian Ballard, P.Geo	Nordmin
15: Mineral Reserve Estimate	N/A	N/A
16: Mining Methods	N/A	N/A
17: Recovery Methods	N/A	N/A
18: Project Infrastructure	Christian Ballard, P.Geo	Nordmin
19: Market Studies and Contracts	N/A	N/A
20: Environmental Studies, Permitting, and Social, or Community Impact	N/A	N/A
21: Capital and Operating Costs	N/A	N/A
22: Economic Analysis	N/A	N/A
23: Adjacent Properties	Christian Ballard, P.Geo	Nordmin
24: Other Relevant Data and Information	Christian Ballard, P.Geo	Nordmin
25: Interpretation and Conclusions	Christian Ballard, P.Geo	Nordmin
26: Recommendations	Christian Ballard, P.Geo	Nordmin
27: References	Christian Ballard, P.Geo	Nordmin
28: Glossary	Christian Ballard, P.Geo	Nordmin

#### Table 2-1: QP- Section Responsibility

The following summarizes the dates of the QP site visit to the Project:

• Christian Ballard, P. Geo., completed a site visit from June 21 to June 22, 2022.

#### **2.3 EFFECTIVE DATES**

The issue date and effective date of the Technical Report is July 11, 2022 and the effective date of the MRE is May 20, 2022.

#### **2.4 INFORMATION SOURCES AND REFERENCES**

This Technical Report has been prepared by an independent consultant who is a QP under NI 43-101 and prepared in accordance with NI 43-101, Form 43-101F1, and Companion Policy 43-101CP. Subject to the conditions and limitations set forth herein, the independent consultants believe that the qualifications, assumptions, and information used by them are reliable, and efforts have been made to confirm this to the extent practicable.

This Technical Report is based, in part, on internal Company technical reports and maps, published government reports, Company letters and memoranda, and public information as listed in Section 27. Several sections from reports authored by other consultants have been directly quoted or summarized in this Technical Report and are so indicated where appropriate, however, the QP has used reasonable efforts to verify such data and does not disclaim any responsibility for its use.

The author of this report has taken all steps in their professional judgment to verify and confirm the accuracy of the information contained in this report and other than with respect to those matters set forth in Section 3 hereof, does not disclaim any responsibility for this Technical Report.

#### **2.5 PREVIOUS REPORTING**

#### 2.5.1 PREVIOUS TECHNICAL REPORTS

The following information is relevant to provide context but is not current and should not be relied upon.

• G. Mosher; Global Mineral Resource Services, 2020. Technical Report Aureus East Gold Property.

#### 2.5.2 PREVIOUS MINERAL RESOURCE ESTIMATES

No previous Mineral Resource Estimates exist for the Project.

#### **2.6 ACKNOWLEDGEMENTS**

Nordmin would like to thank and acknowledge the following people who have contributed to the preparation of this report and the underlying studies under the supervision of the QP"

Nordmin Personnel

Brian Wissent, P. Eng, Brett Stewart, Technical Design Specialist, Annika Van Kessel, P.Geo, Geoscientist

Aurelius Minerals Inc.

Mark Ashcroft, P.Eng, President and CEO, Jeremy K. Niemi, Vice President, Exploration

Aurelius Minerals Consultants

Scott Zelligan, P.Geo, Zelligan Consulting Inc.

#### 2.7 UNITS OF MEASURE

Unless otherwise noted, the following measurement units, formats, and systems are used throughout this Technical Report.

- Measurement Units: all references to measurement units use the International System of Units (SI, or metric) for measurement. The primary linear distance unit, unless otherwise noted, is metres (m).
- General Orientation: unless otherwise stated, all references to orientation and coordinates in this Technical Report are presented as UTM Projection NAD83 Zone 20N with a false easting of 500,000 m.
- Currencies outlined in the Technical Report are stated in Canadian dollars ("CAD\$") unless otherwise noted.
- Gold values for work performed by the Company and previous operators are reported as grams per tonne or parts per billion. A conversion factor of 31.1035 is used to convert grams to troy ounces.

The symbols and abbreviations used in this Technical Report are outlined in Section 28.4.

#### **3 RELIANCE ON OTHER EXPERTS**

Nordmin and the QP have made use of certain information from sources listed in the References, Section 27 of this Technical Report. The authors of this report have taken all steps in their professional judgment to verify and confirm the accuracy of the information contained in these documents and do not disclaim any responsibility for this Technical Report. However, the authors cannot guarantee its accuracy and completeness. We reserve the right, but will not be obligated, to revise the Technical Report and conclusions if additional information becomes known after the date of this Technical Report.

#### 3.1 MINERAL TENURE, SURFACE RIGHTS, PROPERTY AGREEMENTS, AND ROYALTIES

Copies of the tenure documents, operating licenses, permits, and work contract were reviewed by Nordmin. Independent verification of land title and tenure reported in Section 4 was not performed. Nordmin did not verify the legality of any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties but has instead relied on the Company to have conducted the proper legal due diligence. Information for Section 4 regarding Mineral Tenure, Surface Rights, Property Agreements, and Royalties was obtained from:

- G. Mosher; Global Mineral Resource Services, 2020. Technical Report Aureus East Gold Property., verified by the Company in written statement.
- Additional written statements provided to Nordmin by the Company via electronic mail on Monday, June 13<sup>th</sup>, 2022

#### 3.2 Environmental, Permitting, and Liability Issues

The QP has relied upon the Company via written statement via electronic mail provided to Nordmin on June 13<sup>th</sup>, 2022 concerning the Project environmental, socio-economic, and permitting matters relevant to the Technical Report.

#### **4 PROPERTY DESCRIPTION AND LOCATION**

#### 4.1 LOCATION

The Project is located on the eastern shore of Halifax County in Nova Scotia, Canada. The Project is approximately 140 km northeast of Halifax via paved provincial Highway 7, and 8 km north of Port Dufferin (Figure 4-1).

The approximate centre-point of the Project is at 44° 58′ 33″ North Latitude and 62° 22′ 30″ West Longitude on NTS map-sheet 11D/16C. The UTM coordinates are 4,980,500 N and 549,325 E using UTM NAD83 Coordinate Zone 20N.

Surface rights for the portion of the Project affected by mining operations are owned by the Company. The portal for the decline lies on Crown land that is leased by Aureus.

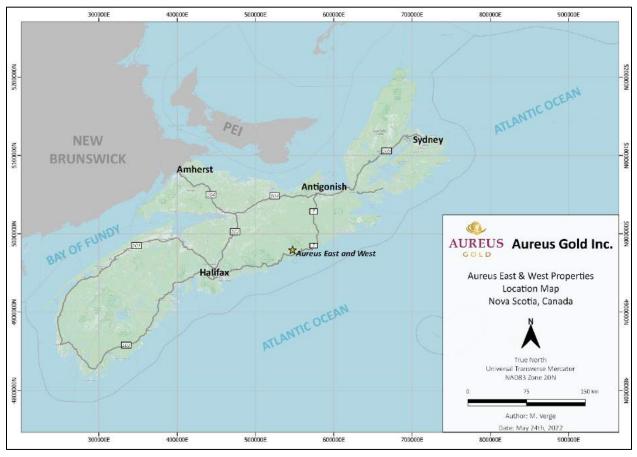


Figure 4-1: Aureus East Property Map

Source: Aurelius Minerals, 2022

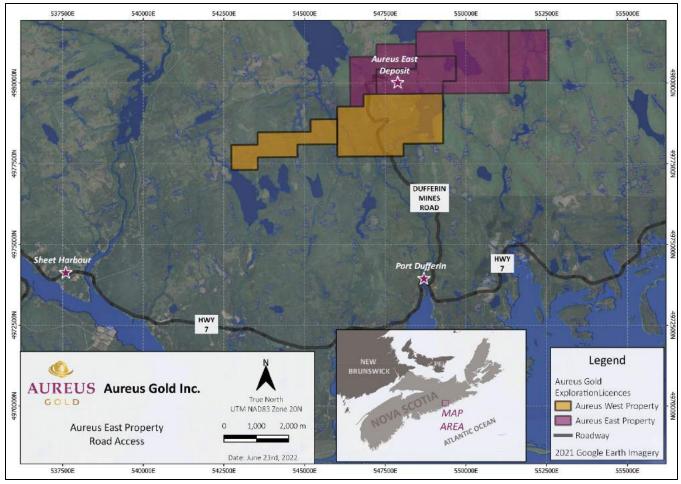


Figure 4-2: Aureus East Deposit Property Map showing the relative locations of Sheet Harbour and Port Dufferin. Access to the Project is via highway 7.

#### 4.2 MINERAL RIGHTS

The Project is 1,069 ha in area and consists of three contiguous exploration licences and one mineral lease. The Exploration Licences consist of 52 claims for a total of 2,080 acres or 842 ha. The Mineral Lease consists of 14 claims (Figure 4-3 and Table 4-1). The mineral lease and claims boundaries have not been surveyed. Nova Scotia uses a map staking system whereby the province is divided into latitude-longitude-defined, regular grid of claims of approximate 40 acres each. Unless a dispute arises, it is not normally required to physically survey or mark claim boundaries.

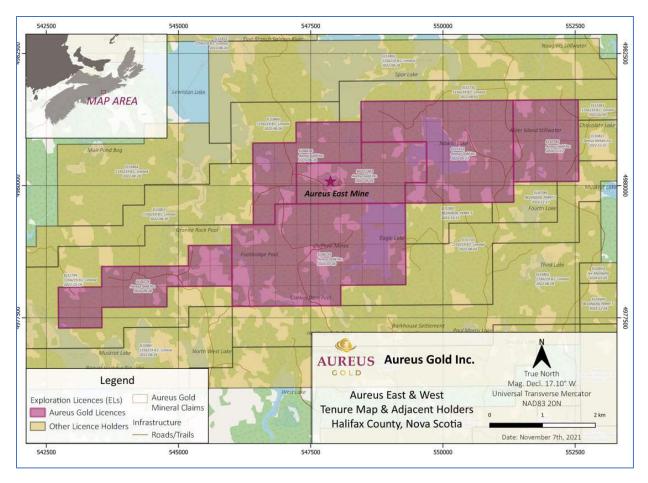


Figure 4-3: Exploration Licenses and Mineral Lease

License Number	Property	Claims	Tracts	NTS Map	Issue Date	Expiry Date
EL07351	Aureus East	Ν	77	11D/16C	2007-05-17	2023-05-17
		NOPQ	78			
		JKPQ	90			
		ABCFGHJKLMNOPQ	91			
		DEMN	92			
EL08619	Aureus East	LOP	80	11D/16C	2009-05-20	2023-05-20
		BCFGHJ	89			
		EFLM	90			
EL50783	Aureus East	ABCFGHJKLOPQ	92	11D/16C	2015-11-17	2023-11-17
MLE51383	Aureus East	NOPQ	79	11D/16C	2017-05-01	2037-05-01
		Q	80			
		А	89			
		ABCDGHI	90			
		DE	91			

Table 4-1: Exploration Licences and Mineral Lease at Aureus East

#### 4.2.1 ROYALTIES

The Nova Scotia Department of Natural Resources & Renewables holds a 1% Net Smelter Royalty (NSR) on all gold sales for the Project. The portion of the Project comprising Exploration Licences 50783, 08619, and 07351 is subject to a 1% NSR beginning on the 5<sup>th</sup> anniversary of Friday October 7, 2016, the closing date of a previous purchase of the Project. This royalty was assigned to and is now held by Metalla Royalty & Streaming Ltd.

#### 4.2.2 PERMITS

The Company obtained all appropriate government drilling permits to complete Phase 1 and 2 drill programs in 2020 and 2021.

The Company has also obtained prospecting permits for all Exploration Licences that contained Crown Land on the Project. Additional permitting is required to drill on Crown Land. There are no known obstacles to obtaining permits.

Adhering to the Mineral Resources Act of Nova Scotia for purposes of activities that do not involve ground disturbance, the Company must obtain verbal or written consent from the owner or occupier of the land prior to commencing work.

For purposes of activities that involve disturbing the ground, the Company must obtain written consent from the owner or occupier of the land prior to commencing work.

#### 4.2.3 Environmental Regulations

There is infrastructure on site that existed when the Company took ownership of the Project. The presence of past mining infrastructure, including several historic tailings ponds, are recognized as important environmental site factors.

The Project has had IAs issued to previous owners and the Company continues to abide by the criteria set out in the most recent IA where applicable. Examples of ongoing environmental monitoring at the site includes the NI 43-101 Technical Report & Mineral Resource Estimate Nordmin Engineering Ltd Aureus East Project Project # 21186-01 Aurelius Minerals Inc. Page 31

following: quarterly surface water and ground water monitoring, weekly tailings management facility monitoring, and monitoring of effluent from the underground workings dewatering system.

#### 4.2.4 MINING AND EXPLORATION RIGHTS IN NOVA SCOTIA

The Project is located in the province of Nova Scotia, a jurisdiction that has a well-established permitting process, with mineral and mining rights reserved largely to the Crown. Rights and access to lands for mineral exploration and mining are governed under the Mineral Resources Act. Mineral rights in Nova Scotia are acquired and located via map staking, whereby mineral licenses can be acquired in order to explore for minerals. Permitting of routine exploration activities (prospecting, geochemistry, geophysics, diamond drilling, etc.) is regulated and approved by the province under the Mineral Resources Act and other Provincial Acts covering but not limited to water resources, environment, etc. Exploration Licences in Nova Scotia entitle the holder to both mineral rights and the permit to conduct exploration activities on a set of claims, as well as the right to apply for a Mineral Lease. A Mineral Lease allows the holder exclusive rights to mine specified minerals from a set of claims.

Permitting and approval of mining projects is coordinated between the municipal, provincial, and federal regulatory agencies, along with systematic community and indigenous consultation. As is the case for similar mine developments in Canada, the Project is subject to the Federal and Provincial Environmental Assessment process. Due to the complexity and size of such projects, various Federal and Provincial agencies have jurisdiction to provide authorizations or permits that would enable the Project construction to proceed. Federal agencies that have significant regulatory involvement include the Canadian Environmental Assessment Agency, Environment and Climate Change Canada, Natural Resources Canada, and DFO. Surface rights for the portion of the Project containing the site and the historic underground workings are held by the Company and the Government of Nova Scotia. Surface rights of areas outside the site are held by private landowners and the Government of Nova Scotia (Figure 4-4).

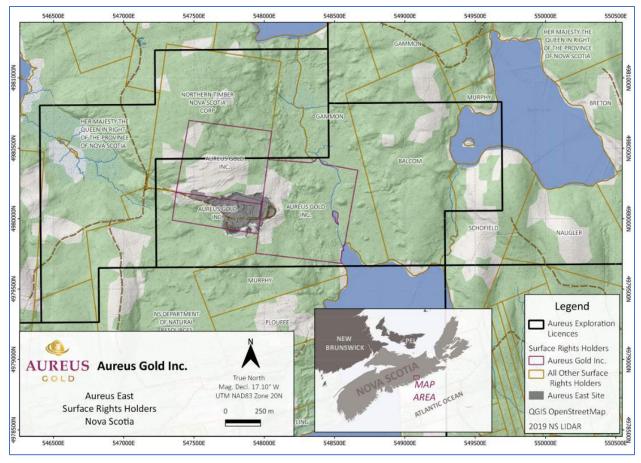


Figure 4-4: Aureus East Deposit Surface Rights Holders

#### 4.3 RISKS AND OTHER FACTORS

The Company is not aware of any other specific risks or factors that could affect the claim position, the private Property ownership, or the permitting of the Project.

#### **5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY**

#### **5.1 ACCESSIBILITY**

The Property is approximately 140 km northeast of Halifax, Nova Scotia with access by paved Highway (Highway 107) to Musquodoboit Harbour, then by paved Highway 7 to Port Dufferin, Nova Scotia. The Project is 8 km north of Port Dufferin via an all-weather gravel road. There are annual spring weight road restrictions which usually last about two months; these restrictions are in place for large vehicles such as buses and transport trucks. The specific weight restrictions and effective dates are posted by the Nova Scotia government. Logging roads provide good access to all parts of the Project (Figure 5-1).

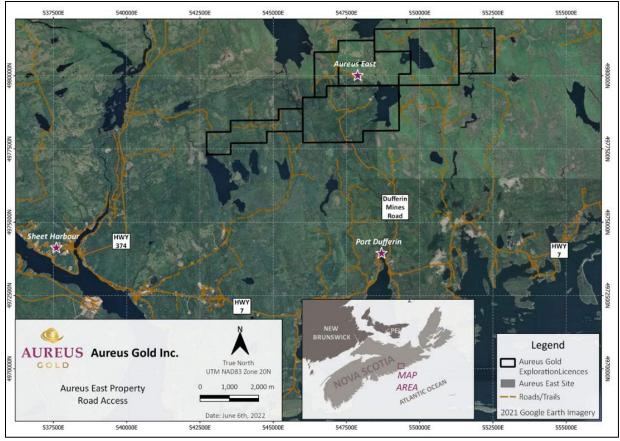


Figure 5-1: Aureus East Road Access

```
Source: Aurelius Minerals, 2022
```

#### 5.2 LOCAL RESOURCES AND INFRASTRUCTURE

The Project is well located with respect to utilities. It is connected to three-phase power transmission line, telephone lines and data lines. An on-site communications tower provides cellular phone connectivity. Most supplies and services can be obtained locally in the Sheet Harbour area, otherwise they are obtained from Halifax-Dartmouth.

There is significant infrastructure on the Aureus East site including underground workings, mill, mine offices, shops, and ancillary structures, as well as a tailing management facility. Figure 5-2 shows an aerial view of the Aureus East portion of the Project.



Figure 5-2: Aureus East Mine

Source: Aurelius Minerals Inc. 2022

The underground workings are accessed through a portal and decline. The decline is typically 5 to 6 m wide by 3.5 to 4 m high and descends at 8° (-14%). The decline is approximately 1,300 m long and descends 160 vertical metres. Bulk samples and limited underground excavations were carried out across the Project with underground workings crossing three of the four offsetting faults.

#### 5.3 CLIMATE

The climate in the region is appropriate for year-round drilling and site operations. Field work such as mapping and soil sampling can be carried out during the spring, summer, and fall. Sheet Harbour has a humid continental climate, with hot summers and mild to moderate winters. Meteorological records for the period between 1987 and 2000 indicate that the coldest month is January, with a mean temperature of -5.75 °C between the years of 1988 and 1999; the hottest month is August, with a mean temperature of 17.6 °C between the years of 1987 and 2000. Mean annual precipitation between 1987 and 2000 was 1,643 mm, which includes a mean annual snowfall of 124.5 cm.

#### 5.4 PHYSIOGRAPHY

The Project is situated in an area of moderate relief in undulating terrain of linear, swampy intervals and low rolling hills with a maximum elevation of 100 m above sea level. The topography of the area slopes gently southeast to sea level from an elevation of about 70 m at the Aureus East Site.

Drainage on the Project is controlled by branches of the Salmon River that drains numerous small lakes. Eagle Lake lies southeast of the site, Spar Lake lies to the North, and Nowlin Lake to the East. Glacial till, between 2 and 10 m thick, covers most of the Project. Drumlins, elongated southeast-northwest and measuring about 1 km by 350 m, rise approximately 30 m above the surrounding ground.

#### **6 HISTORY**

#### 6.1 SUMMARY

The first discovery of gold in the area was reported near Port Dufferin in 1868. Mapping between 1860 and 1905 by E. R. Faribault of the Geological Survey of Canada aided in identifying regional structures and controls on mineralization. Exploration Licence 50561 was originally Exploration Licence 11818 in 1986, held by Seabright Resources Inc. In 1987, Seabright Resources Inc. changed its name and transferred the claims to Seabright Explorations Inc. In 1991, Seabright Explorations Inc. changed its name to Corner Bay Minerals Inc.

In June 1994, Dufferin Resources Inc. purchased Exploration Licence 11818 from Corner Bay Minerals Inc. In September 1994, Exploration Licence 11818 was converted to Mining Lease 94-2-and issued to Dufferin Resources Inc.

In 1998, Newfoundland Goldbar Resources Inc. acquired Dufferin Resources Inc. and in 2003 sold Dufferin Resources Inc. to Azure Resources Corp. In 2005, Azure Resources Corp. sold Dufferin Resources Inc. to Jemma Resources Corp.

In 2004, a change in the Provincial legislation reclassified Mining Leases as Mineral Leases.

In November 2008, Ressources Appalaches Inc. acquired 100% of Dufferin Resources Inc. from Jemma Resources Corp. The acquisition pertained to all assets of Dufferin Resources Inc., including all the site infrastructure. In January 2015, Ressources Appalaches Inc. went into receivership, and in February 2015, Mineral Lease 94-2 was converted into Exploration Licence 50561.

In September 2016, Resource Capital Gold Corp. purchased Exploration Licences 50561, 08619, and 07351 from the Receiver.

In January 2017, Resource Capital Gold Corp., through its subsidiary Maritime Dufferin Gold Corp., applied for a Mineral Lease that correlated with Exploration Licence 50561. Exploration Licence 50561 was changed to Mineral Lease 51383.

In July 2019, Resource Capital Gold Corp. went into receivership and ownership of the Project passed to 2672403 Ontario Ltd., a wholly-owned subsidiary of Sprott Resource Lending Corp. from whom Resource Capital Gold Corp. had obtained a loan.

In February 2020, the Company acquired 2672403 Ontario Ltd. from Sprott Resource Lending Corp. for a total consideration of US\$8,200,000 payable in cash or common shares of the Company. In addition to the Project, the Company also acquired the Tangier and Forest Hill Properties.

On May 29<sup>th</sup>, 2020, the Company changed the name of 2672403 Ontario Ltd. to Aureus Gold Inc.

Table 6-1 summarizes chain of ownership of the Project.

_	_	•		
From	То	Owner	Controlling Subsidiary	Property
1986	1987	Seabright Resources Inc. Seabright Explorations Inc.		Exploration Licence 11818
1987	1991	Seabright Explorations Inc.	Seabright Explorations Inc.	Exploration Licence 11818
1991	1994	Corner Bay Minerals Inc.	Seabright Explorations Inc.	Exploration Licence 11818
1994	1994	Dufferin Resources Inc.	Dufferin Resources Inc.	Exploration Licence 11818
1994	1998	Dufferin Resources Inc.	Dufferin Resources Inc.	Mining Lease 94-2
1998	2003	Newfoundland Goldbar Resources Inc.	Dufferin Resources Inc.	Mining Lease 94-2
2003	2004	Azure Resources Corp.	Dufferin Resources Inc.	Mining Lease 94-2
2003	2004	Azure Resources Corp.	Dufferin Resources Inc.	Mining Lease 94-2
2004	2005	Azure Resources Corp.	Dufferin Resources Inc.	Mineral Lease 94-2
2005	2008	Jemma Resources Corp.	Dufferin Resources Inc.	Mineral Lease 94-2
2008	2015	Ressources Appalaches Inc.	Dufferin Resources Inc.	Mineral Lease 94-2
2015	2016	Ressources Appalaches Inc.	Dufferin Resources Inc.	Exploration Licence 50561
2016	2017	Resource Capital Gold Corp.	Maritime Dufferin Gold Corp.	Exploration Licence 50561
2017	2019	Resource Capital Gold Corp.	Maritime Dufferin Gold Corp.	Mineral Lease 51383
2019	2020	Sprott Resource Lending Corp.	2672403 Ontario Ltd.	Mineral Lease 51383
2020	Present	Aurelius Minerals Inc.	Aureus Gold Inc.	Mineral Lease 51383

#### Table 6-1: Chain of ownership of the Project

Source: Nordmin 2022

#### **6.2 EXPLORATION AND DEVELOPMENT**

A history of exploration within the Project is summarized in Table 6-2. Mine development in the immediate Project area started in 1880 at West Dufferin, also known as the Old Dufferin Mine, adjacent to, but not part of, the Project. The Lake Eagle Mine, 700 m east of the Old Dufferin Mine, was also one of the first producers in the area. Production from mines in this district between 1883 and 1935 was on the order of 35,000 to 42,000 ounces from 110,000 tonnes of processed rock. In 1923, Maple Leaf Gold Mining Co. sank a 11 m deep shaft approximately 900 m east of Aurelius East and drifted west along the vein approximately 50 m. A second shaft was sunk 30.5 m east of the first shaft. In 1934, Crown Reserve Mines sank a shaft to a depth of 25.9 m about 50 m south of the present Aureus East site, on a 35.6-cm wide vein. A second quartz vein was uncovered south of the original vein and two additional shafts were sunk to a depth of 40 m, with limited drifting and stoping.

Table 6-2-: Summary of exploration and development history on the Project

From	То	Company	Summary
1986	1993	Seabright/ Corner Bay Minerals	Geological mapping, soil geochemistry, geophysical surveys (Magnetometer, IP and VLF-EM), trenching, 3,237 m of diamond drilling totaling 35 holes. Construction of access road, and installation of a three-phase power transmission line.
1993	1998	Dufferin Resources	659 m of diamond drilling from 13 holes to confirm size, configuration and existence of higher gold grades at the crest of first two saddle veins Completed environmental study, gravity metallurgical work Underground development and mill construction 3,418 tonnes were milled Mine closure due to economic reasons, mill placed on care and maintenance, underground allowed to flood
1998	2003	Newfoundland Goldbar Resources/ EnviroGold Technologies Inc	10 exploration diamond drill holes totalling 1,364 m – confirmed existence of saddle veins, established 700 m strike length for the two upper saddle reef veins and existence of 13 (or more) stacked saddle reefs EnviroGold Technologies Inc. began underground development – dewatered and continued to drift an additional 150 m, with a new development in the second and third saddles consisting of 350 m and 300 m respectively. An excess of 55,00 tonnes was milled, with 7,397 ounces of gold recovered at ~4.2 g/t Operations stopped in 2002 for economic reasons, workings were allowed to flood
2003	2005	Azure Resources Corp	Partial dewatering of underground workings, sampling of portions of the saddles and legs of veins, surface surveying, surveying and sampling of tailings, metallurgical studies, reconstruction of the camp, and a redesign and reconstruction of the mill.
2005	2008	Jemma Resources	Refurbished mill, processed tailings leading to gaining approximately 1,600 ounces of Au from ~31,745 tonnes of tailings at 1.6 g/t
2008	2016	Ressources Appalaches	Commissioned MineTech to prepare a Technical Report on the Project for 2009 with an updated report in 2012 Airborne LiDAR survey was carried out by LiDAR Services Ltd.of Calgary – identified surficial deposits, geological structures and folding. This was used to help focus follow-up ground surveys, prospecting and sampling. Ground magnetometer survey was carried out by Geosig Inc. of Quebec City. Total line distance was 28.5 km – identified two major and one smaller magnetic anomalies with a E-NE trend The Mine was dewatered in 2012, personnel were hired to refurbish mill, enlarged tailings pond and purchased mining equipment In 2014 Ressources Appalaches was milling 245 tonnes per day Went into receivership in 2015
2016	2019	Resource Capital Gold Corp.	Rehabilitation of both surface and underground infrastructure to permit resumption of mining. Drove 2,560 m of underground development and mined 43,593 tonnes. 5,846 ounces of gold averaging 4.0 g/t was recovered Mill recovery at 80.9% RCGC went bankrupt shortly after and mine went on care and maintenance
2020	Present	Aurelius Minerals Inc.	Aurelius has completed 21,082 m of diamond drilling, 249.6 m of channel sampling, and some field work since acquisition up until the effective date of the report of May 20, 2022. Phases 1 and 2 of drilling were very successful, yielding some significant gold grades, and a third phase of drilling is currently being planned. Field mapping and sample collection has been conducted on Aurelius' three contiguous exploration licenses and its Mineral Exploration License.

Source: Nordmin 2022

# 6.3 HISTORICAL MINERAL RESOURCE ESTIMATES

No previous Mineral Resource Estimates exist for the Project.

## 6.4 DRILLING

A total of 229 diamond drill holes with a combined length of 43,571 m were drilled on the Project by various operators from 1987 to the effective MRE date of May 20, 2022 as summarized in Table 6-3.

Company	Year	Number of Holes	Total Length (m)
Seabright Resources Inc.	1987	2	304.8
Seabright Explorations Inc.	1988	33	2,927.1
Dufferin Resources Inc.	1993	13	659.2
Dufferin Resources Inc.	1995	8	120.3
Newfoundland Goldbar Resources Inc.	1999	10	1,364.0
Azure Resources Corp.	2004	6	618.2
Ressources Appalaches Inc.	2008	23	3,303.5
Ressources Appalaches Inc.	2009	19	3,028.5
Ressources Appalaches Inc.	2010	31	5,290.0
Ressources Appalaches Inc.	2014	23	3,680.5
Resource Capital Gold Corp.	2017	9	1,087.1
Resource Capital Gold Corp.	2018	3	105.8
Aurelius Minerals Inc.	2020- 2021	49	21,082
Total		229	43,571

Table 6-3-: Summary of drilling history

## 6.5 MINING HISTORY

Table 6-4 summarizes the historic extraction of mineralized rock from the Project. There are some gaps in supporting documentation; thus, tonnages extracted and ounces of gold milled can be assumed to understate actual totals.

#### Table 6-4: Extraction history

Year	Company Tonnes	Tonnes	Gold Ounces	Grade (g/t)	Notes
1995	Dufferin Resources	3,418	117	1.1	Operated until April 28, 1995
2000	Newfoundland Goldbar	4,000	Unknown	Unknown	Mineralized rock stockpiled, not milled
2001	Newfoundland Goldbar	51,172	7,288	4.4	55,172 tonnes were reported milled, likely including 2000 stockpile
2004	Azure Resources	23,144	1,649	2.2	Operated until November, 2004
2006	Jemma Resources	31,745	1,602	1.6	Tailings re-processing 31, 745 tonnes
2014	Ressources Appalaches	17,000	Unknown	Unknown	Gold Production unknown
2018	Resource Capital Gold Corp	43,600	5,850	4.1	Gold Production unknown

# 7 GEOLOGICAL SETTING AND MINERALIZATION

## 7.1 REGIONAL GEOLOGY

The bedrock geology of Nova Scotia is divided into the Avalon Terrane to the north and the Meguma Terrane to the south. Terranes are separated by the east-trending Minas Geofracture (Cobequid-Chedabucto Fault System). The Meguma Terrane is predominantly composed of Cambrian to Lower Devonian sediments and turbiditic metasediments and underlies most of the southern mainland of Nova Scotia (Figure 7-1). Rock units of the Meguma Terrane were folded along NE trending, sub-horizontal axes during the Early Devonian Acadian Orogeny (~375-325 Ma) when the Meguma Terrane docked with the eastern side of the Avalon Terrane. These sediments have been subdivided into two groups, the Cambro-Ordovician age (~488-443 Ma, Meguma Group), and the Silurian to Lower Devonian aged group (~420 Ma).

The Meguma group is comprised of the basal Goldenville Formation and the overlying Halifax Formation. The Goldenville consists of massive, thick-bedded dark to light-grey metagreywacke. The greywacke beds represent fining-upward cycles that are commonly capped and separated by thin, slaty units that are chloritic or carbonaceous. The overlying Halifax Group consists of slate and metasiltstone. Slate is the predominant lithology (75%) and is black, carbonaceous and sulphidic. The metasiltstone is cross-laminated and thinly bedded. The upper portion of the Halifax Formation is commonly comprised of grey-green slate and siltstone.

The Silurian to Lower Devonian-aged group lies in the folded keels of clastic sediments and volcanics of the White Rock, Kentville, New Canaan, and Torbrook formations, which occur at the Terrane's west and north-easterly limits.

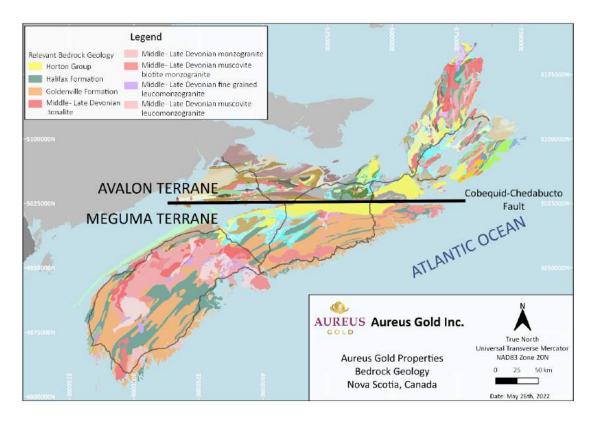


Figure 7-1: Regional Geology of Nova Scotia

The Meguma Group was intruded by granitoid plutons consisting of granite, granodiorite, granodiorite porphyry, and lesser quantities of tonalite and trondhjemite around 375 Ma. Intrusives range in size from a few square km to that of composite batholiths. The intrusions deformed and metamorphosed the turbidite sequence during the Acadian Orogeny. The main feature of the deformational history of the Meguma Terrane is the formation of a series of major E-W trending upright symmetric to slightly reclined asymmetric folds. A penetrative slaty cleavage was developed in the argillaceous units during this episode as well as a pervasive pressure solution cleavage in the greywackes. This folding and cleavage have an important role in the development of the gold deposits.

Regional metamorphism is of greenschist to upper amphibolite facies. Contact metamorphism occurs adjacent to granitoid intrusions. A pervasive alteration which may extend for several kilometres along strike on either side of an individual gold deposit consists of silicification, carbonatization, sericitization, and sulphidization. A less pervasive and more restricted alteration within the gold districts is characterized by carbonate and chlorite (+/- arsenopyrite) within gold districts.

Mineral occurrences within the Meguma Terrane occur in the following 3 styles:

- Concordant, syn-depositional, or diagenetically related deposits such as the Eastville base metal occurrences associated with the Goldenville Halifax Formation, and the Transition Zone and Clinton-type iron formations.
- Hydrothermal, structurally controlled deposits such as the 370 Ma-aged auriferous concordant Goldenville Formation quartz veins.

• Mineralization associated with Acadian plutonism such as East Kemptville or Millet Brook uranium deposits.

## 7.2 PROPERTY GEOLOGY

The Project is underlain by folded metasediments of the Goldenville Formation, chiefly as greywacke with minor interbedded argillite, and the Halifax Formation, composed of black, graphitic slate. While confined to the northern end of the Project, rocks of the Halifax Formation serve as an excellent marker horizon. The rocks of the Goldenville Formation are folded into a series of gently east-plunging, upright anticlines and synclines which host mineralization within the Project.

There are 4 significant faults on the Project that offset the Crown Reserve Anticline and vein array of the Deposit (Figure 7-2). These faults are referred to as the Wedge, Refuge, Decline, and Raise Faults from west to east respectively. The Wedge and Decline Faults trend NW-SE, subparallel to the Harrigan Cove Fault (HCF), whereas the Refuge and Raise Faults trend generally N-S.

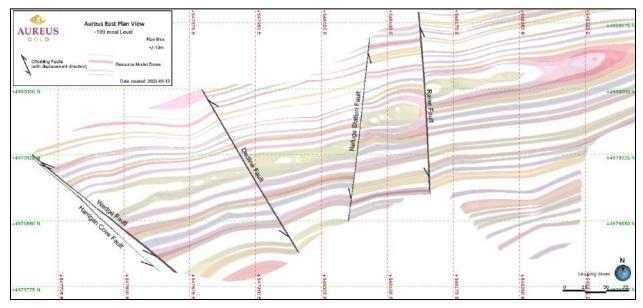


Figure 7-2: Offsetting Faults

Source: Aurelius Minerals Inc., 2022

The Project is a typical saddle-reef type hosted gold deposit, analogous to the Bendigo Deposit in Australia. The Deposit has a strike length of approximately 1600 m, a width of at least 200 m, and a depth of more than 900 m. Gold mineralization is associated with quartz saddles and limbs, but is not restricted to only quartz veins. Gold bearing quartz saddle-veins (veins at the apex of the fold) occur within dilation zones in the argillite units along the hinge of the fold axis. Argillite host rock is weakly mineralized. Leg reef veins occur in the limbs and are also characterized as dilational. A total of 203 stacked mineralized lenses have been identified at the Deposit through diamond drilling, mapping, channel sampling, and underground mining. While no marker units have been identified, the stratigraphic section was subdivided into a series of units which could be correlated from limb to limb along strike.

The units were classified as:

- Massive greywacke with little or no argillite
- Interbedded silty-greywacke and argillite

- Argillite
- Argillite beds with minor amounts of greywacke
- Bedding parallel quartz veins, which typically occur within argillite beds
- Cross-cutting quartz veins

#### 7.2.1 STRUCTURAL GEOLOGY

The Salmon River and Crown Reserve anticlines are separated by the Ruth Falls Syncline, which trends east-northeast across the Project. The western ends of these structures are terminated by the NW striking (sinistral) HCF. This major fault has displaced the Salmon River and Crown Reserve anticlines along the northwest trace of the fault by approximately 1.5 km (Figure 7-3). The displacement is sinistral strike-slip separating the anticline into two deposits where they are referred to as the Salmon River and Dufferin Mines anticlines.

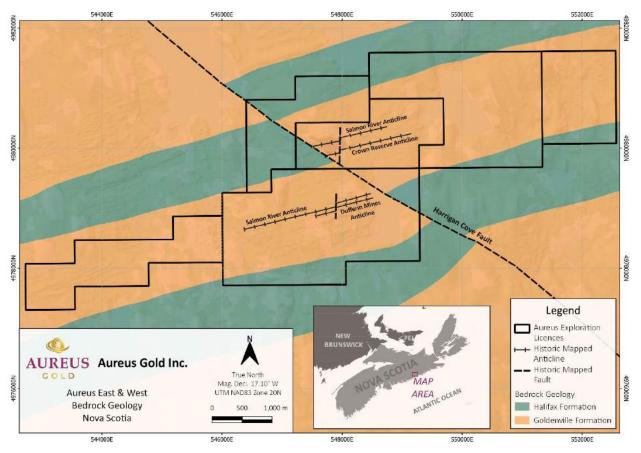


Figure 7-3: Geology and Structural Setting

Source: Aurelius Minerals Inc., 2022

The Crown Reserve Anticline is a tight chevron-style fold, steeply inclined to the south, the hinge zone of which is a rounded arc-shaped structure 5 to 10 m across. The limbs (leg-reef veins) are uniform and straight. Near surface, the south limb has a dip of approximately 65° and the dip of the north limb averages 78°.

## 7.2.2 ALTERATION

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc. Greywacke is commonly silicified and iron carbonate-altered. Silicification is recognized as an overprinting texture in which the host rock has been hardened by an influx of silica-rich fluid. Silicification is typically stronger in areas surrounding heavy cross-cutting veining. Strong or intense silicification has recrystallized and destroyed the original sedimentary texture. Bleaching is also common in areas of intense silicification; bleaching is used as a general term to describe an overall lightening of the color of the rock which can be caused by different processes. Iron carbonate is recognized by clusters of sub-millimetre orange-brown specks.

Sericite and biotite alteration are noted less frequently in greywacke. Biotite alteration occurs as submillimetre black specks; sericite alteration occurs as pale-yellow specks or overprinting throughout greywacke. This typically presents as a light yellow-grey pervasive colouration within the greywacke lithology. These textures are patchy or localized and typically soften the host rock.

Argillite is softer and more brittle than the greywacke and typically presents with biotite, graphite, and sericite alteration. Biotite is typically black-brown and occurs as an overprinting. Pale-yellow sericite and is usually more patchy or localized. Graphite alteration has a distinctive sheen and occurs locally within argillite beds. Chloritization is sometimes noted in quartz veins and is recognized by dark green stringers within veins.

## 7.2.3 MINERALIZATION

The gold-bearing anticlinal structures at the Project have a strike length of approximately 1,600 m, a width of at least 200 m (limited drilling to the south indicates greater than 100 m of width), and a depth of more than 900 m. Gold-positive results are reported at each interval of drilling along the 1,600 m of strike. 203 individual stacked mineralized lenses have been intersected by diamond drilling or exposed in underground workings.

Throughout the Meguma Terrane and within the Deposit gold mineralization is largely associated with the Goldenville Formation, within and adjacent to quartz veins. These quartz veins are better developed in argillite or slate and their equivalent schist than in the more competent greywacke and quartzite strata. Gold bearing quartz saddle-veins occur within dilation zones of the argillite units along the hinge of the fold axis as well as within quartz leg reef veins primarily on the steeper dipping north limbs.

The saddle veins are a milky white to grey, coarse-crystalline quartz containing thin layers of argillite and/or chlorite. Veins are generally thicker at the apex of the anticline with sharp contacts between quartz and argillite on both the hanging wall and the footwall.

The most common forms of gold mineralization are as free gold in fine films near crack-seal laminae, along vein-wall contacts, within sericitic fractures and within quartz veins. Gold is also observed to be attached to sulphides such as galena and arsenopyrite. Most of the gold associated with quartz veining is located along the vein-wall rock contacts and contains approximately 5% silver. Common gangue minerals within the quartz veins include ankerite, siderite, calcite, kaolinite, and chlorite. Associated sulphide minerals, in order of increasing abundance, include arsenopyrite, pyrite, galena, sphalerite, chalcopyrite, pyrrhotite, and stibnite. Gold commonly occurs with galena and arsenopyrite with galena being the best indicator for gold. Arsenopyrite, up to a few percent relative abundance, occurs within veins and the wall rocks.

# **8 DEPOSIT TYPES**

#### 8.1 TURBIDITE-HOSTED MEGUMA TERRANE GOLD DEPOSITS

The turbidite-hosted gold deposits of Nova Scotia have been compared to similar-age turbidite-hosted quartz vein deposits elsewhere in the world, particularly those in the Bendigo and Ballarat areas of the Lower Paleozoic Lachlan Fold Belt in the state of Victoria, Australia, and have historically been similarly classified. It has been recognized that this deposit class and proposed that it be identified as a member of the turbidite-hosted, quartz-carbonate vein deposit (Bendigo Type) category. Turbidite-hosted Meguma Terrane gold deposits are a sub-type of orogenic gold deposits. Orogenic gold deposits form during or soon after peak metamorphism in collisional metamorphic Terranes of all ages. These deposits exhibit strong structural control in brittle faults and ductile shear zones as quartz-dominated stockworks, breccias, laminated veins, vein arrays, replacements, and disseminations (Figure 8-1). Most deposits formed under greenschist facies metamorphic conditions (250 - 350 °C, 1 to 3 kbar, 2 to 20 km deep) in compressional or transpressional settings.

Mineralization occurs in both concordant and discordant quartz veins and altered wall rock, with generally high gold-silver ratios and high fineness, accompanied by carbonate minerals and 2 to 5% sulphides. Historically, high grade veins were exploited (5 - 30 g/t gold), but many deposits comprise large volumes of lower grade, bulk-mineable mineralization. This creates the potential to contain significantly more resources than deposits of similar style only hosting gold within quartz-veins (reefs) themselves.

Alteration consistently adds CO<sub>2</sub>, S, K, H<sub>2</sub>O, and SiO<sub>2</sub> to wall rocks in the form of carbonates (ankerite, calcite, dolomite), sulphides (pyrite, arsenopyrite, pyrrhotite), and silicates (muscovite, biotite, K-feldspar, albite, and chlorite). Scheelite, rutile, and tourmaline are common, and at higher metamorphic grades amphibole, diopside, and other skarn-like replacement minerals occur. The typical geochemical signature shows elevated As, B, Bi, Hg, Sb, Te, and W, with generally low Cu, Pb, and Zn. Gold was transported as sulphide complexes in reduced, near neutral metamorphic fluids of high CO<sub>2</sub> and low salinity and deposited by pressure decreases during episodic seismic events (leading to the characteristic banded quartz veins) or by desulphidation reactions with wall rocks.

The Deposit is an orogenic, turbidite hosted quartz-carbonate vein deposit as it is hosted within a series of argillites and greywacke metamorphosed to, typically, greenschist facies. This style of deposit is also known as a Saddle Reef deposit and can be found only in a few locations globally. The deposit type is often characterized by the formation of gold bearing quartz veins within the argillite unit, commonly referred to as mineralized Belts. At Aureus East there are 203 identified mineralized belts stacked within greywacke units as per this resource model update. These range in thickness from 0.5 m to 20 m and vary from being tightly folded at depth to more openly folded at surface. Veins of this deposit type, which form during deformation, occur in three major geometries commonly referred to as saddle reefs, leg reefs and spur reefs. Saddle reefs occur at the apex of the fold and often host the greatest gold grades. Leg reefs extend down the limbs of the folds, beyond saddle reefs, and are generally parallel with meta-sedimentary bedding. These are often referred to as "BP" veins in the Nova Scotia goldfields ("BPVN" in Figure 8-1). Spur reefs are veins which cross between layers and may be in the apex or fold limbs. This is typically captured under the term "angular" in the Nova Scotia goldfields. Aureus East contains all three types of reef veins outlines above (Figure 8-1).

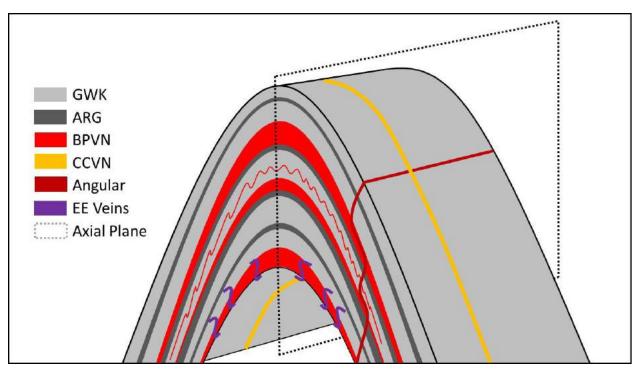


Figure 8-1: Schematic of vein-types within the Project

# **9 EXPLORATION**

Aurelius Minerals Inc. took ownership of the Project in 2020. Work completed prior to the acquisition is considered historical in terms of current NI 43-101 technical reporting. A summary of historic exploration is present in Section 6.

Work completed by the Company includes completing 21,082 m of diamond drilling from 2020 to 2021 as a part of its drilling programs; underground channel sampling totaling 131 samples over 32 m strike length, a geophysical aeromagnetic survey, and several small field work programs testing outcrop exposure across the Project.

## 9.1 DRILL HOLE AND CHIP SAMPLING

When the Company acquired the Project in 2020, unsampled historic core was found on site. The Company compiled historic logs and uploaded them to their current logging software, MX Deposit<sup>™</sup>. Review of drill logs indicated many of the holes did not have adequate sampling and in some cases no sampling. The Company completed a full review, re-logging, and sampling campaign on overlooked areas to contribute to the resource estimate and increase the level of knowledge on the Project.

Historic drill holes were logged and sampled at the Company's logging facility. The same logging and sampling methods used during the Company's recent drill campaigns were applied to the infill sampling. Section 11 contains a detailed description of these methods. The areas of interest included any overlooked or unsampled quartz veins, unsampled mineralized intervals, and unsampled argillite beds greater than 50 cm. The Company uses a minimum sample length of 50 cm because the nugget effect has more of an effect on smaller sample sizes, which caused some infill samples to overlap with previously sampled intervals"

The infill sampling program confirmed previously unidentified intervals of mineralization, aligned with the Company's updated understanding of the Project. Updated sampling protocols allowed for the Company to add an additional 1,693 m of samples to the database. Approximately 447 m of new assays were added to the resource and current model by in-filling information where previously there were gaps, and the remaining 1,246 m consisted of check samples to confirm prior results. Figure 9-1 shows surface locations of drill holes from the Ressources Appalaches Inc. drilling programs which were included in the infill sampling program by the Company. Figure 9-2 to Figure 9-4 show cross-sections of some underground drill holes ("UG" prefix) with significant intercepts.

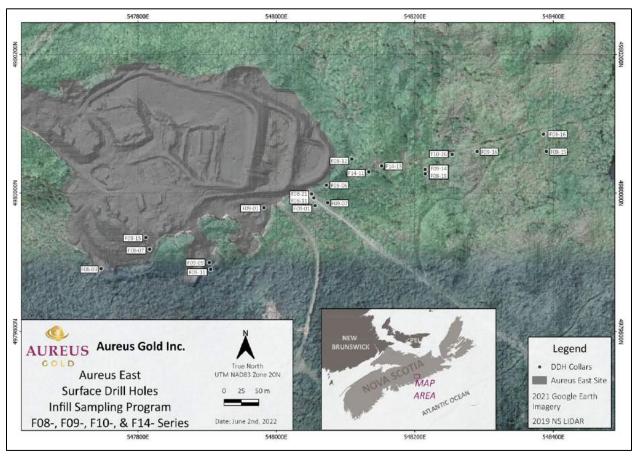


Figure 9-1: Aureus East surface drill holes which were re-sampled as a part of the infill sampling program. Source: Aurelius Minerals Inc., 2022

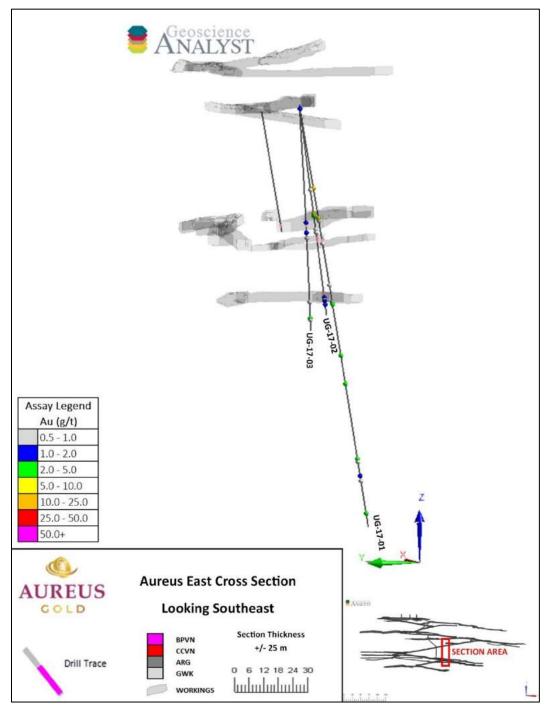


Figure 9-2: Cross-section looking Southeast of UG-17-01 to UG-17-03

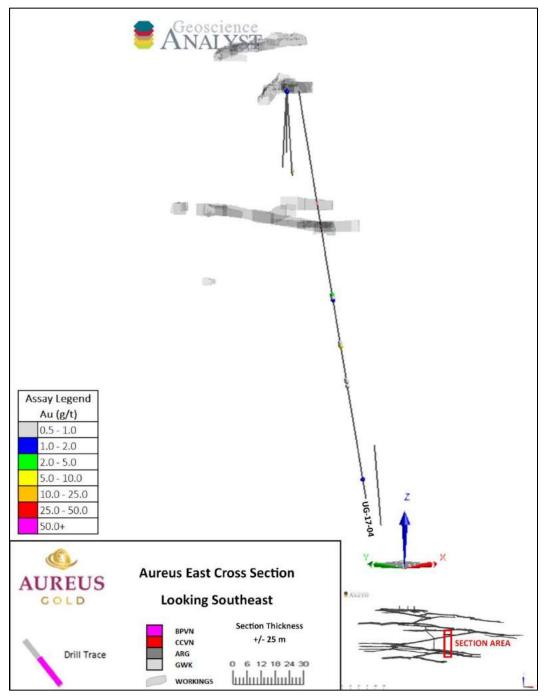


Figure 9-3: Cross-section looking Southeast of UG-17-04

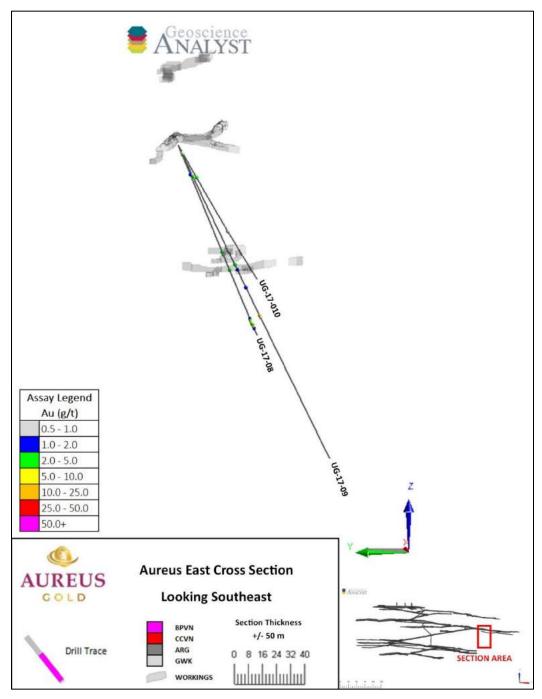


Figure 9-4: Cross-section looking Southeast of UG-17-08 to UG-17-010

#### 9.1.1 CHANNEL SAMPLING

The Company conducted a channel sampling program throughout existing underground development in multiple locations. It was designed to enhance the interpretation of the Project's geology and support the ongoing mineral resource work. Most of the channels started on the sill of the drift and ran up the wall, crossing the main saddle vein leg (Figure 9-5). A few horizontal channels were added after the assays were received from the lab. They were used to test cross cutting veins located near gold found in vertical channels. They were also used to test cross cutting veins near structures such as folds, faults, and shearing.



Figure 9-5: Channel sample taken from historic underground drift. Source: Nordmin, 2022

The first location of channel sampling was conducted on the 985 Ramp at the Project. It was designed to target the legs of historic Saddle 2 (Figure 9-6). A total of 17 vertical channels were cut over a 32 m strike length, totaling 131 samples, excluding QA/QC blanks and standards. Table 9-1 summarizes channel sample location and assay information for the 985 Ramp location.

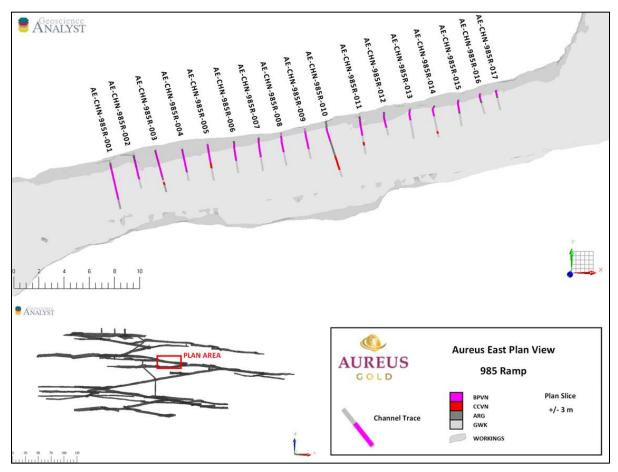


Figure 9-6: 985 level Ramp Channel Samples plan view at -15 m above sea level

Channel Number	Easting (m)	Northing (m)	Elevation (m)	Length (m)	Azimuth (°)	Dip (°)	Samples	Composites (Au g/t)
AE-CHN-985R-001	548000	4979945	-10	4.10	347	1	8	7.58
AE-CHN-985R-002	548002	4979946	-10	3.40	347	-1	6	1.19
AE-CHN-985R-003	548004	4979946	-10	4.20	345	2	9	8.09
AE-CHN-985R-004	548006	4979947	-11	4.00	348	6	8	1.4
AE-CHN-985R-005	548008	4979947	-11	4.10	350	-1	8	4.6
AE-CHN-985R-006	548010	4979947	-11	3.50	351	3	7	4.35
AE-CHN-985R-007	548012	4979948	-11	3.50	351	0	7	0.98
AE-CHN-985R-008	548014	4979948	-12	3.60	349	8	7	2.2
AE-CHN-985R-009	548016	4979949	-12	3.60	348	3	7	11.5
AE-CHN-985R-010	548018	4979947	-12	5.60	342	0	11	3.23
AE-CHN-985R-011	548020	4979949	-12	4.20	350	1	8	1.46
AE-CHN-985R-012	548022	4979950	-13	3.10	346	3	6	2.41
AE-CHN-985R-013	548024	4979950	-13	4.00	350	2	8	1.75
AE-CHN-985R-014	548026	4979950	-13	4.30	348	3	8	4.5
AE-CHN-985R-015	548028	4979951	-14	4.30	351	6	8	0.88
AE-CHN-985R-016	548029	4979952	-14	3.70	344	4	7	2.7
AE-CHN-985R-017	548031	4979952	-14	4.20	347	5	8	1.49

Table 9-1: Summary of channel sampling at the 985 Ramp location

The second location of channel sampling was conducted at 940 East at the Project. It was designed to target the legs of historic Saddle 5. A total of 24 channels were cut over a 45 m strike length, 22 vertical, and 2 horizontal. A total of 154 samples were taken, excluding QA/QC blanks and standards. Results are summarized in Table 9-2, assays pending.

Channel Number	Easting (m)	Northing (m)	Elevation (m)	Length (m)	Azimuth (°)	Dip (°)	Samples
AE-CHN-940E-001	547887	4979903	-69	2.60	155	1.0	5
AE-CHN-940E-001A	547887	4979903	-69	1.00	345	-1	2
AE-CHN-940E-002	547891	4979904	-69	2.60	168	0	5
AE-CHN-940E-002A	547891	4979904	-69	1.00	348	0	2
AE-CHN-940E-003	547895	4979905	-69	2.70	172	3	5
AE-CHN-940E-003A	547895	4979905	-69	1.00	352	-3	2
AE-CHN-940E-004	547898	4979906	-69	2.85	167	2	5
AE-CHN-940E-004A	547898	4979906	-69	1.00	347	-2	2
AE-CHN-940E-005	547904	4979907	-69	2.75	158	7	5
AE-CHN-940E-006	547906	4979908	-69	3.00	164	4	5
AE-CHN-940E-007	547909	4979908	-69	2.20	299	88	4
AE-CHN-940E-008	547910	4979908	-69	1.95	39	82	4
AE-CHN-940E-009	547914	4979909	-70	2.05	105	88	4
AE-CHN-940E-009A	547914	4979909	-70	1.00	0	-13	2
AE-CHN-940E-010	547918	4979909	-70	2.00	190	6	4
AE-CHN-940E-010A	547918	4979909	-70	1.65	10	6	3
AE-CHN-940E-011	547921	4979910	-70	2.60	172	5	5
AE-CHN-940E-011A	547921	4979910	-70	1.00	352	-5	2
AE-CHN-940E-012	547924	4979910	-70	2.65	176	5	5
AE-CHN-940E-013	547929	4979910	-71	2.15	163	16	4
AE-CHN-940E-013A	547929	4979910	-71	0.55	343	10	1
AE-CHN-940E-014	547889	4979904	-69	2.50	165	4	5
AE-CHN-940E-014A	547889	4979904	-69	1.00	345	-4	2

Table 9-2: Summary of channel sampling at 940 East location

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc. Nordmin Engineering Ltd Project # 21186-01 Page 56

Channel Number	Easting (m)	Northing (m)	Elevation (m)	Length (m)	Azimuth (°)	Dip (°)	Samples
AE-CHN-940E-015	547893	4979905	-69	2.50	171	0	5
AE-CHN-940E-015A	547893	4979905	-69	1.00	351	0	2
AE-CHN-940E-016	547897	4979906	-69	3.00	170	3	6
AE-CHN-940E-016A	547897	4979906	-69	1.00	350	-3	2
AE-CHN-940E-017	547912	4979909	-69	1.90	176	13	4
AE-CHN-940E-018	547916	4979909	-70	2.85	182	19	5
AE-CHN-940E-019	547927	4979910	-70	2.25	176	13	4
AE-CHN-940E-020	547901	4979908	-69	5	170	4	9
AE-CHN-940E-021	547902	4979907	-69	3	170	0	5
AE-CHN-940E-022	547913	4979910	-70	3	178	4	5
AE-CHN-940E-023	547894	4979907	-68	8	85	-3	14
AE-CHN-940E-024	547909	4979908	-69	3	246	-10	6

The third location of channel sampling was conducted on the 940 Ramp at the Project. It was designed to target the legs of historic saddle 2 and 3 at depth across Domain 2. There were 2 horizontal channels cut over a 12 m strike length, spaced roughly 5.5 m apart. A total of 11 samples were taken, excluding QA/QC blanks and standards. Results are summarized in Table 9-3, assays pending.

#### Table 9-3: Summary of channel sampling at 940 ramp location

Channel Number	Easting (m)	Northing (m)	Elevation (m)	Length (m)	Azimuth (°)	Dip (°)	Samples
AE-CHN-940R-001	547891	4979947	-62	3.50	170	1	7
AE-CHN-940R-002	547893	4979938	-62	2.00	165	-1	4

Source: Aurelius Minerals Inc., 2022

The fourth location of channel sampling was conducted on the 944 Level at the Project. It was designed to target the legs of historic saddle 4. A total of 44 channels were cut over a 48 m strike length. A total of 178 samples were taken, excluding QA/QC blanks and standards. Results are summarized in Table 9-4, assays pending.

Channel Number	Easting (m)	Northing (m)	Elevation (m)	Length (m)	Azimuth (°)	Dip (°)	Samples
AE-CHN-944L-001	547828	4979891	-58	1.60	314	69	3
AE-CHN-944L-002	547826	4979891	-59	1.55	350	78	3
AE-CHN-944L-003	547824	4979891	-59	2.50	168	11	5
AE-CHN-944L-004	547822	4979891	-59	2.50	161	16	5
AE-CHN-944L-005	547820	4979890	-59	3.15	149	10	5
AE-CHN-944L-006	547818	4979889	-59	2.30	340	86	4
AE-CHN-944L-007	547816	4979888	-59	3.00	151	14	6
AE-CHN-944L-008	547814	4979887	-59	2.75	147	4	5
AE-CHN-944L-009	547814	4979886	-59	2.30	326	76	4
AE-CHN-944L-010	547811	4979885	-59	3.00	149	20	5
AE-CHN-944L-011	547810	4979883	-59	2.35	0	-1	4
AE-CHN-944L-012	547809	4979882	-59	2.50	0	0	5
AE-CHN-944L-013	547807	4979881	-59	2.60	0	0	5
AE-CHN-944L-014	547805	4979880	-59	2.40	124	88	4
AE-CHN-944L-015	547803	4979880	-59	2.35	0	0	4
AE-CHN-944L-016	547801	4979879	-59	2.10	0	-1	4
AE-CHN-944L-017	547799	4979879	-58	2.00	0	0	4
AE-CHN-944L-018	547798	4979878	-58	2.00	0	0	4
AE-CHN-944L-019	547796	4979877	-58	2.00	0	0	4
AE-CHN-944L-020	547794	4979876	-58	2.50	158	12	5
AE-CHN-944L-021	547793	4979875	-58	1.50	147	18	3
AE-CHN-944L-022	547792	4979875	-58	1.50	0	0	3
AE-CHN-944L-023	547789	4979874	-58	1.50	164	31	3
AE-CHN-944L-024	547786	4979878	-58	2.10	59	88	4
AE-CHN-944L-025	547788	4979879	-59	1.65	0	0	3

Table 9-4: Summary of channel sampling at 944 Level location

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc. Nordmin Engineering Ltd Project # 21186-01 Page 58

Channel Number	Easting (m)	Northing (m)	Elevation (m)	Length (m)	Azimuth (°)	Dip (°)	Samples
AE-CHN-944L-026	547790	4979879	-59	1.60	1	16	3
AE-CHN-944L-027	547792	4979880	-59	1.50	340	23	3
AE-CHN-944L-028	547794	4979881	-58	2.10	336	15	4
AE-CHN-944L-029	547795	4979882	-58	1.55	332	6	3
AE-CHN-944L-030	547797	4979883	-58	2.30	326	4	4
AE-CHN-944L-031	547799	4979884	-59	1.75	330	29	3
AE-CHN-944L-032	547801	4979884	-59	3.65	340	4	6
AE-CHN-944L-033	547803	4979886	-59	2.60	340	4	4
AE-CHN-944L-034	547804	4979887	-59	2.00	120	85	4
AE-CHN-944L-035	547806	4979888	-59	2.00	130	85	4
AE-CHN-944L-036	547808	4979889	-58	2.00	106	86	4
AE-CHN-944L-037	547810	4979890	-58	1.50	359	83	3
AE-CHN-944L-038	547811	4979891	-59	2.00	102	83	4
AE-CHN-944L-039	547813	4979892	-59	2.40	325	12	4
AE-CHN-944L-040	547815.4521	4979891	-59	3.90	336	2.88	6
AE-CHN-944L-041	547817.5837	4979892	-59	4.60	335	1.02	7
AE-CHN-944L-042	547787.6215	4979873	-59	2.00	160	10.67	4
AE-CHN-944L-043	547785.9362	4979873	-59	2.10	159	14.16	4
AE-CHN-944L-044	547784.8692	4979877	-58	2	173	85.81	4

Once channel locations were determined, site preparation would begin. This involved scraping the floor down to bedrock and subsequent blow piping to remove any excess muck. A starting channel location was selected and marked out with spray paint. Subsequent channels were marked out with spray paint using a 2-inch rubber strip as a guide. Channels were spaced out every 2 m down the drift. Individual samples along the channel were marked out by a geologist.

A concrete saw was used to cut the channel and each sample was cut at the marked start and stop points to define the sample interval. Each sample was chipped out using a combination hammer and placed into a plastic bag with a corresponding sample tag. After each channel was cut out and sampled, it was then sprayed down with water and remarked with spray paint. The channel number and "End" were written at the end of each channel indicating the direction of sampling and logging. Finally, a well-lit photo was taken of the channel and samples. The same logging and sampling methods used during the Company's drill campaigns were applied to the channel sampling program. Samples ranged from 50 to 80 cm and QA/QC samples were inserted at a rate of one blank and one standard alternating every ten samples. The standard would rotate between a low, med, and high grade reference material. Any noted visible gold was followed by an additional blank QA/QC sample. The start, pivot, and end points of each channel were surveyed. Each channel was digitized in Geoscience Analyst<sup>™</sup> based off the survey data and was added to the current drilling database for the Project.

The channel sampling program has identified mineralization at each of the four locations and confirms the presence of gold occurring at the contact between the quartz veins and sediment host rock interface. Continuity of grade is demonstrated through sampling intervals of 2 m down the drift. In some cases, grade was found in the floor and walls of the development.

## 9.2 FIELD WORK

During 2020-2021, the Company completed field work on Exploration Licenses 08619, 50783 and Mineral Lease 51383. This was initially done by prospecting along old logging roads and paths to gauge accessibility. Mapping and sampling were limited due to lack of outcrop exposure. Eleven samples were collected at the Project composed of float, subcrop, and outcrop. Results were pending as of the effective date of this report.

Sample ID	Sample Type	Easting (m)	Northing (m)	Elevation (m)
AWFS-21-009	FLOAT	547248	4980160	69
AWFS-21-010	FLOAT	547230	4980104	74
AWFS-21-011	FLOAT	547291	4979893	72
AWFS-21-012	FLOAT	547298	4979818	74
AWFS-21-015	FLOAT	547002	4980211	34
AWFS-21-016	OUTCROP	547148	4980148	44
AWFS-21-017	OUTCROP	547158	4980252	27
AWFS-21-018	OUTCROP	547133	4980343	29
AWFS-21-019	SUBCROP	547116	4980364	29
AWFS-21-020	SUBCROP	547021	4980473	27
AWFS-21-031	OUTCROP	547131	4979932	53

Table 9-5: Summary of field samples collected during the 2020-2021 field programs

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc. Nordmin Engineering Ltd Project # 21186-01 Page 60

## 9.3 GEOCHEMICAL SAMPLING

No geochemical surveys have been completed on the Project.

## 9.4 GEOPHYSICS

## 9.4.1 HELICOPTER MAGNETIC AND RADIOMETRIC SURVEYS

In July of 2021, SHA Geophysics of Toronto, ON completed a helicopter-borne high-resolution tri-axial aeromagnetic survey. The survey flew over the Project between July 5<sup>th</sup> and July 8<sup>th</sup>, 2021. The helicopter flew at an average height of 30 m with a line spacing of 75 m. A total of 445 line `km of data was collected over the Project. Table 9-6 summarizes the flight line details at the Project.

The objective of the aerial survey was to provide high resolution aeromagnetic data that would aid in producing an improved interpretation on bedrock geology and structural controls on gold mineralization in the Meguma Terrane, specifically around the Company's properties. Table 9-6 shows specifications for the survey covering the Project. Figure 9-7 demonstrates the results of the Geophysical survey.

Flight Specifications	Aureus E and W		
Traverse Direction	0° - 180°		
Traverse Spacing	75 m		
Control Direction	Variable		
Control Spacing	~ 1,200 m		
Terrain Clearance	30 m		
Block Production	445 km		

#### Table 9-6: Geophysical study flight line summary

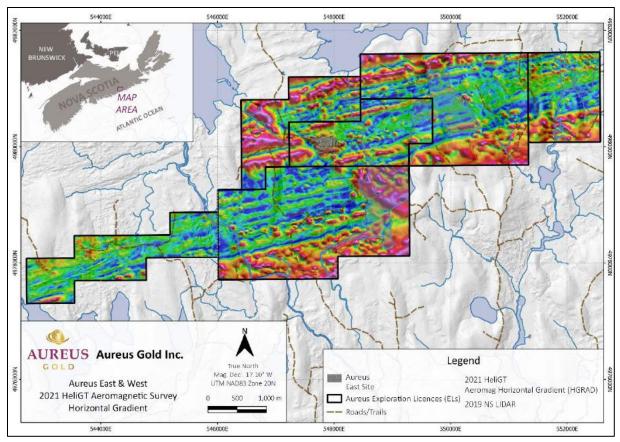


Figure 9-7: Horizontal Gradient at the Project

Magnetic anomalies produced from this survey were used to identify targets for 2021 drilling whose results are included in this resource estimate.

# **10 DRILLING**

## **10.1 AUREUS EAST DEPOSIT**

Diamond drilling at the Aureus East deposit consists of 43,571 m of diamond drilling both from surface (HQ or NQ core size) and underground workings (NQ or BQ core size) from 1987 through 2021. Table 10-1 provides a summary of the drill campaigns by year and operator. Table 10-1 shows drill collar locations by drill campaign for each deposit.

Company	Year	Number of Holes	Total Length (m)
Seabright Resources Inc.	1987	2	304.8
Seabright Explorations Inc.	1988	33	2,927.1
Dufferin Resources Inc.	1993	13	659.2
Dufferin Resources Inc.	1995	8	120.3
Newfoundland Goldbar Resources Inc.	1999	10	1,364.0
Azure Resources Corp.	2004	6	618.2
Ressources Appalaches Inc.	2008	23	3,303.5
Ressources Appalaches Inc.	2009	19	3,028.5
Ressources Appalaches Inc.	2010	31	5,290.0
Ressources Appalaches Inc.	2014	23	3,680.5
Resource Capital Gold Corp.	2017	9	1,087.1
Resource Capital Gold Corp.	2018	3	105.8
Aurelius Minerals Inc.	2020- 2021	49	21,082
Total		229	43,571

#### Table 10-1: Aureus East Drill Hole Summary

Source: Aurelius Minerals Inc., 2022

#### **10.1.1 SEABRIGHT EXPLORATION INC./CORNER BAY MINERALS INC.**

A total of 35 holes comprising 3,232 m of exploration diamond drilling were completed from June 1987 to October 1988. The location of the main Salmon River Anticline and the Crown Reserve Anticline were identified as part of this drilling program. There were 3 stacked saddle veins intersected during drilling with numerous sights of visible gold. Logan Drilling was contracted to drill the NQ core drilling campaign on the Project. All core was logged in Geolog computer shorthand, except for PD-87-01 and PD-87-02.

There are no known drilling, sampling, or recovery factors that materially impact the accuracy and reliability of the results for the Seabright Exploration Inc. / Corner Bay Minerals Inc. campaign.

## **10.1.2 DUFFERIN RESOURCES INC.**

A total of 13 definition drill holes were completed in 1993 comprising 659 m. This drilling confirmed the lateral continuity of saddle veins at the Project; gold was discovered in all holes through the crests of the veins. This drilling also helped to identify structural offsets in the anticline.

A total of 8 holes comprising 120 m were drilled in 1995. No reporting information could be found for this drilling.

There are no known drilling, sampling, or recovery factors that materially impact the accuracy and reliability of the results for the Dufferin Resources Inc. campaign.

## **10.1.3** NEWFOUNDLAND GOLDBAR RESOURCES INC.

A total of 10 holes comprising 1,364 m were drilled in 1999. No original reporting information could be found for this drilling. All information related to this drilling is derived from previous compilations at the Project.

There are no known drilling, sampling, or recovery factors that materially impact the accuracy and reliability of the results for the 1999 Newfoundland Goldbar Resources Inc. campaign.

#### **10.1.4 AZURE RESOURCES CORP.**

A total of 6 holes comprising 618 m were drilled by Azure Resources Corp. in 2004. The drilling contractor was Forages La Virole. Drill logs were located for this campaign, but no logging or QA/QC sampling protocol records were found.

There are no known drilling, sampling, or recovery factors that materially impact the accuracy and reliability of the results for the 2004 Azure Resources Corp. campaign.

#### 10.1.5 2008-2014 Ressources Appalaches Inc.

A total of 73 NQ-sized diamond drill holes were completed from 2008 to 2010, comprising 11,622 m, by Forages La Virole. Tropari and Reflex instruments were used to measure down hole orientation. There were no downhole surveys for some holes due to equipment malfunctions.

During the 2008-2010 Drill campaign by Resources Appalaches the first 6 saddle reef type veins were systematically drilled at intervals of 75 to 150 m over a length of 600 m and down to a maximum depth of 210 m.

The goals of the 2010 drill program were to extend the primary axis of gold mineralization on the Project, to investigate fold structures, to test the greywacke for different styles of mineralization, and to confirm the depth of the mineralization to below 300 m.

For the 2008 to 2010 drilling, the minimum length of a core sample was 10 cm and the maximum length was 170 cm with the exception of four samples over 200 cm long. The average length of the samples was 80 cm.

A total of 4,556 samples were collected from 73 drill holes between 2008 and 2010, with an average of 62 samples per drill hole. The total length of sampled core was approximately 2,746 m, which represents approximately 23% of the entire core length drilled. After being examined and logged, core was sampled in the following manner:

- 1) The core of the section to be sampled was cut in half with a hydraulic core splitter
- 2) The top half was put aside to be sent to the laboratory.
- 3) The second half of the core was returned to its place in the core box and a tag bearing the sample number was placed at the beginning of the split core forming the sampled length; and,

4) The two metallic collection bowls (one on either side of the splitter), the core splitter and the working table were then thoroughly brushed clean before proceeding to the next sample.

No QA/QC samples were entered during the 2008 and 2009 samples. During the 2010 sampling program, a blank, standard, and a duplicate were inserted at regular intervals at a ratio of 1 for every 37 samples (i.e., after 37 samples a blank, standard, and a duplicate were included).

The primary objective of the 2014 drill program was to explore veins 3 through 6, between depths of 75 m and 200 m from Surface. The secondary objective was to explore veins towards the east of the project.

A total of 23 NQ-sized diamond drill holes were drilled in 2014, with a combined length of 3,680.5 m. Of those, 9 holes with a length of 598.5 m were drilled underground, and 14 holes with a length of 3,082 m were drilled on Surface. Drilling was contracted to 2 companies: Forages de l'Est and Forages La Virole, both from Rimouski, Quebec. Drill holes were spotted and logged by Ressources Appalaches staff and outside contractors. The drill program was overseen by Alain Hupé of Ressources Appalaches.

A total of 61 blanks were sent with the 2014 samples. Of these, 59 assayed at 0.05 ppm or below, including 34 returning values at or below the detection limit of 0.01 g/t Au. There was one blank which assayed at 0.45 g/t Au. Another blank, sample number J722224, assayed at 7.08 g/t Au. However, this may be the result of a standard being mislabeled as a blank.

A total of 24 CDN-GS-2M standards, 19 CDN-GS-7F standards, and one HiSilP1 sample were submitted to the lab. Both the CDN-GS-2M and CDN-GS-7F standards, as assayed, had averages that were close to the expected values, but the range of values was wider than expected. In both cases, values were generally lower than would have been expected. One CDN-GS-2M standard and one CDN-GS-7F standard assayed at a near-nil grade; these are considered to be outliers.

A total of 47 duplicate samples were submitted. One duplicate sample, sample number J722029, did not appear in the assay certificates, leaving 46 pairs of duplicate samples. A widespread between original and duplicate values was found for individual samples, which is expected, given the nuggety style of gold mineralization in the Project. However, a strong correlation was found overall, with a correlation coefficient (r) of 0.94.

## **10.1.6** RESOURCE CAPITAL GOLD CORP.

In 2017, Resource Capital Gold Corp. completed 9 underground diamond drill holes totaling 1,087.1 m. In 2018, Resource Capital Gold Corp. completed 3 BQ-sized underground diamond drill test holes totaling 105.8 m.

There is no information regarding the processing of drill core generated by the Resource Capital Gold Corp. drill program in 2017 or 2018, but during the 2019 site inspection, the Company was informally told that the core had been logged but not sampled. Aureus conducted an audit of the core in 2020 and the core was relogged and sampled.

## **10.1.7** AURELIUS MINERALS INC.

The Company drilled 21,082 m from 2020 to 2021 as part of its Phase 1 and 2 drilling programs. Diamond drilling was conducted on the Project on 3 underground pads and 9 surface pads (Figure 10-1 and Figure 10-2). Drilling intersected 57 mineralized zones including several high grade zones and 211 VG occurrences.

Underground drilling was conducted at three locations. 880 Ramp, 900 Level and 880 Level respectively. A total of twenty-one holes were drilled totaling 9,226.6 m (Figure 10-3 and Figure 10-4). Cuttings were deposited into the underground sump and pump system as well as drained into abandoned headings. Casings were left in the drift floors so enable down hole televiewer data collection at a later date.

For surface drill pads, the pad clearing size was minimized based on the drilling equipment being used. Water and drill cuttings were carefully monitored and managed in order to minimize environmental impact. A water recycling plant was used to reduce freshwater consumption during diamond drilling. Drill inspections were conducted to ensure drill contractors were working safely and following Company policies and procedures. Surface drilling consisted of twenty-eight drill holes and two wedge holes for a total of 11,854.95 m.

There are no known drilling, sampling, or recovery factors that materially impact the accuracy and reliability of the results of the Company drill campaign.

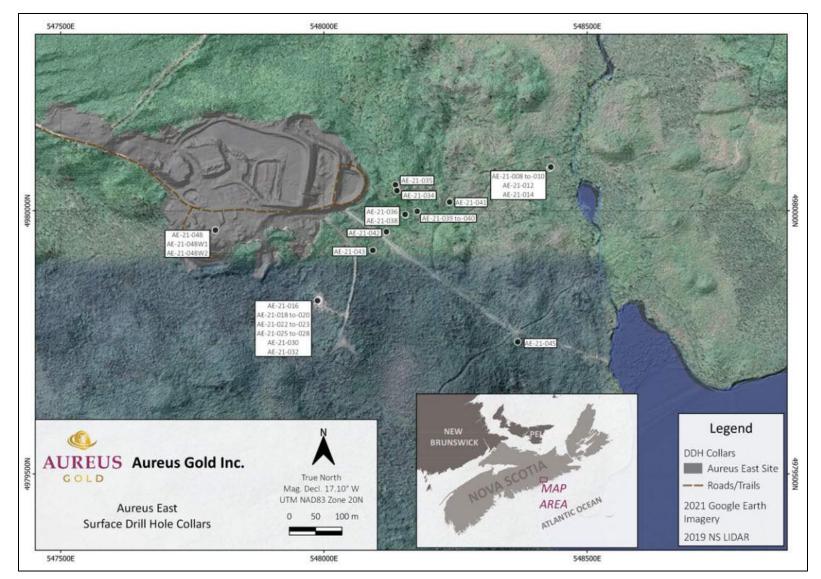


Figure 10-1: Overview of surface drill hole collars

Source: Aurelius Minerals Inc., 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc. Nordmin Engineering Ltd Project # 21186-01 Page 67

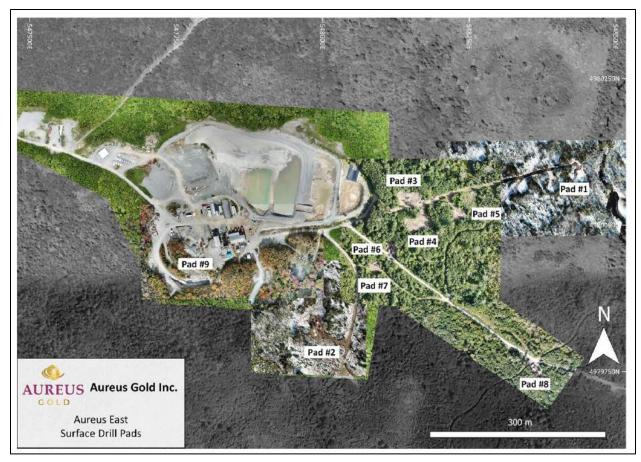


Figure 10-2: Surface drill pads at Aureus East

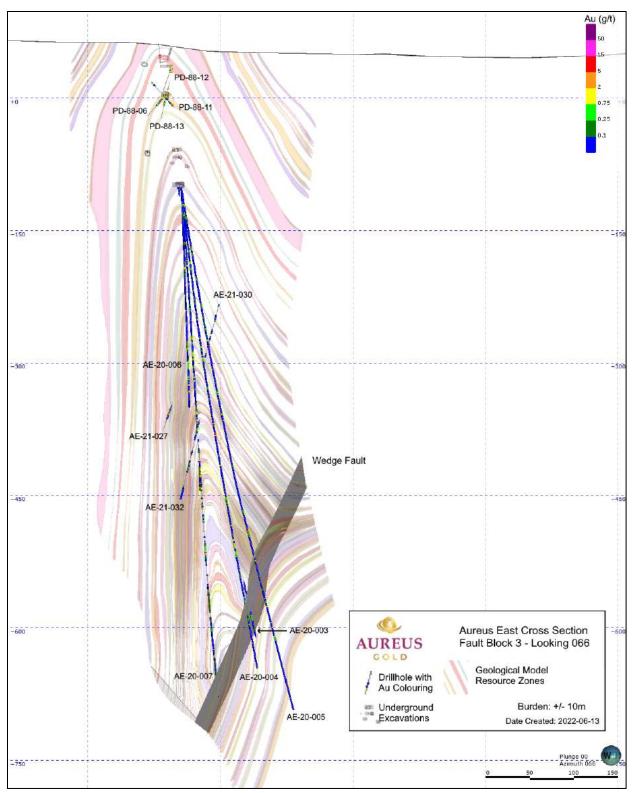


Figure 10-3: Aureus East Deposit cross section (547890 m E approximate center of section at axis) Source: Aurelius Minerals Inc., 2022

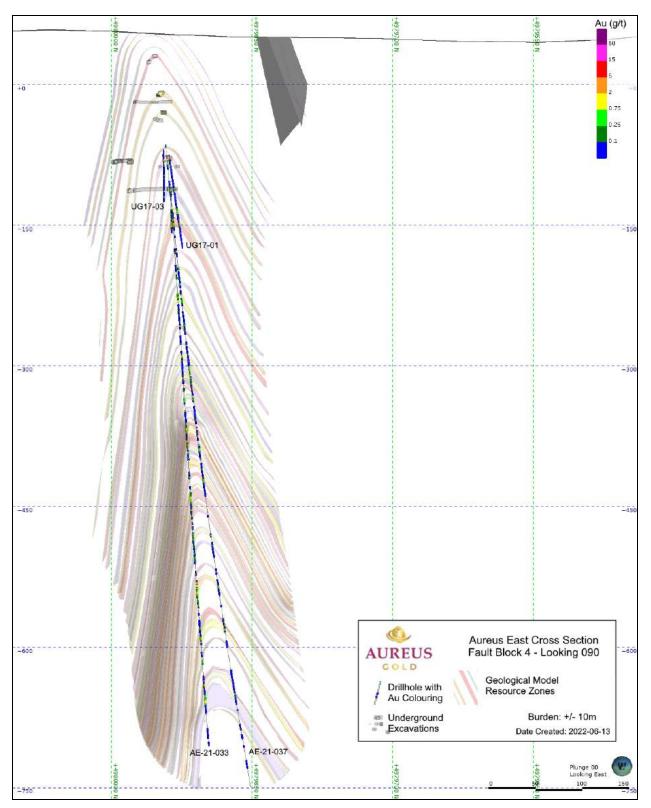


Figure 10-4: Aureus East Deposit cross-section showing AE-21-033 and AE-21-037.

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc. Nordmin Engineering Ltd Project # 21186-01 Page 70

# **10.2 CORE RECOVERY**

There is minimal core loss at the Project. The rocks are highly competent with the exception of local intersections with major and minor fault zones where a non-material amount of core may be lost. Core loss is not a material factor.

# 10.3 CORE LOGGING

A description of the logging, sampling, and assaying procedures follow. Recovery and RQD were measured for every 3 m of drilling and recorded in the drill hole database. Any core loss or other factors affecting core recovery were recorded by the geological team. Core logging was completed using MX Deposit. Entries for logging include lithology, structure, alteration, mineralization, and veining. The current logging database offers 17 lithologies, 26 structure types, 6 veining types, 7 mineralization types and 18 alteration types. Core box numbers and measurements, RQD, sample intervals, and core photographs are also entered into MX Deposit either by a geotechnician or geologist. Core was carefully handled to prevent contamination or lost core. Sample intervals were selected based on lithology contacts and mineralization with a minimum sample size of 50 cm to reduce the nugget effect. For every 50 samples, 1 standard, 1 blank, and 1 field duplicate were entered. A cut line was drawn on the core along the apex of the bedding plane. Core was cut with a diamond saw, either a Vancon diamond bladed core saw or a Husqvarna MS 360 wet saw. Half the core was kept in the box for storage and half was sent to the lab. Samples were packaged individually in sealed via zip tie in plastic sample bags then batched into rice bags of 50 samples for delivery directly from site to the lab via Armour Transport. In addition to the sampling procedures which will be discussed in Section 11, the Company recorded recovery and rock quality designation information for the drill core. Coarse rejects of select samples containing zone material and VG were set aside for future work. See Section 11 for detailed descriptions of the Company's sampling and assaying procedures.

# **10.4 SPECIFIC GRAVITY**

The Company has collected 250 water immersion specific gravity ("SG") measurements from 13 drill holes within the Project.

The measurements were taken from NQ sized diamond drill core using the measurement of the weight of the core in air versus the weight in water (Archimedes Method), by applying the following formula:

 $Specific \ Gravity = \frac{Weight \ in \ Air}{(Weight \ in \ Air - Weight \ in \ Water)}$ 

An OHAUS explorer scale and a 100 g reference weight were used for taking SG measurements. Figure 10-5 and Figure 10-6 demonstrate how both the dry and wet measurements were recorded.

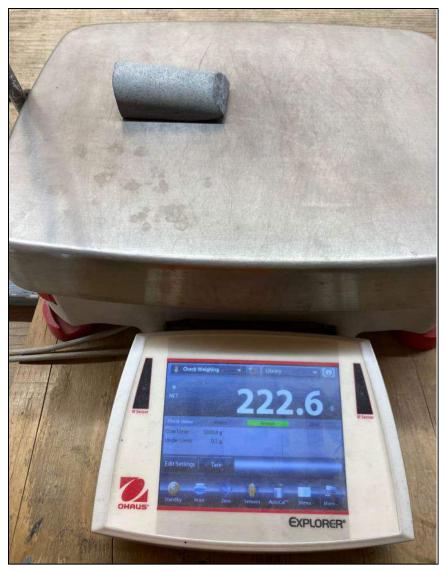


Figure 10-5: Dry SG measurement being recorded



Figure 10-6: Wet SG measurement being recorded Source: Aurelius Minerals Inc., 2022

Figure 10-7 and Figure 10-8 display where specific gravity samples were taken throughout the Deposit and their corresponding specific gravity value and Lithology. Table 10-2 shows the average SG measurement for each lithologic unit.

Lithology	Average Specific Gravity			
Argillite	2.82			
BPVN	2.70			
BPVN + Argillite	2.81			
Carbonate Vein	2.66			
GMA	2.75			
Greywacke	2.72			
Sulfide Vein	3.32			
Carbonate Vein in Greywacke	2.64			
Argillite and BPVN	2.82			
Quartz	2.62			

Table 10-2: Average SG measurements for lithologies within Aureus East.

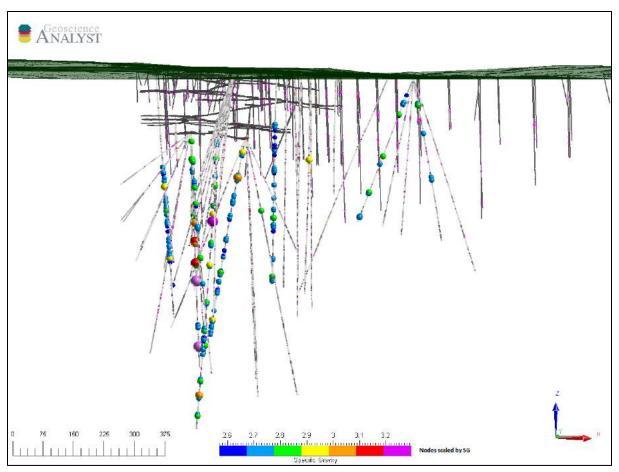


Figure 10-7: Location and SG measurement of SG samples within Aureus East

Source: Aurelius Minerals Inc., 2022

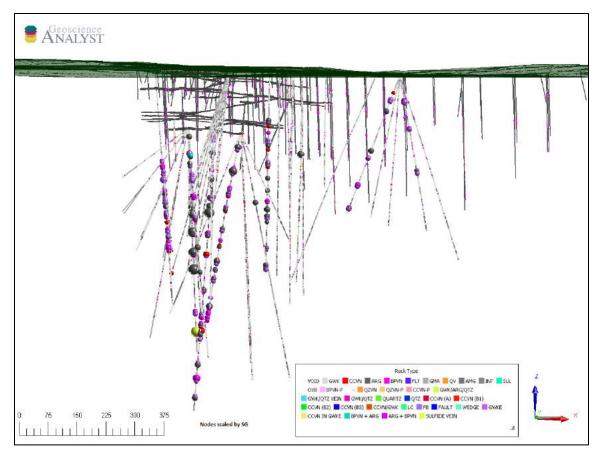


Figure 10-8: Location and lithology of SG measurements taken from within Aureus East Source: Aurelius Minerals Inc., 2022

## **10.5 COMMENTS ON SECTION 10**

In the opinion of the QP, the quantity and quality of the lithological, collar, downhole survey and specific gravity data collected in the exploration programs are sufficient to support the MRE.

- Diamond drill coring and logging completed by Aurelius and previous operators meet industry standards for exploration on Meguma Terrane Turbidite-hosted gold deposits.
- Collar surveys and downhole surveys were performed using industry-standard instrumentation;
- Recovery data from core drilling programs was of good quantity and quality.
- Drill hole orientations are appropriate for the mineralized style. Drill trace orientations are shown in example cross sections in Section 14.8.
- Drill hole intercepts demonstrate that sampling is representative of mineralization.
- No other factors were identified with the data collected from the drill programs that could significantly affect the MRE.

# **11 SAMPLE PREPARATION, ANALYSES AND SECURITY**

### **11.1 ASSAY SAMPLE PREPARATION AND ANALYSIS**

Drill core sampled by the Company was numbered using consecutive series of sample numbers, with a sample label stuck to the core box labelled with hole number and the total sampled interval. One blank, one standard and one duplicate were inserted every fifty samples. The core was cut lengthwise using either a Vancon Diamond Bladed core saw or a Husqvarna MS 360 wet saw along a cut line marked by a geologist. One half of the sample was placed in a plastic sample bag, labelled, and sealed with a zip-tie, and the other half returned to the core box for reference. Sample bags were then batched into rice bags of 5 to 15 (depending on sample size) samples for delivery directly from site to the lab via Armour Transport.



Figure 11-1: Left-Core sample cut shack; Right-Sample selection throughout ~100 m of core Source: Nordmin, 2022

All samples were prepared by ALS Moncton, New Brunswick, then shipped to an ALS laboratory for analysis, most often (but not limited to) ALS Vancouver. The global quality program at ALS includes internal and external inter-laboratory test programs and regularly scheduled internal audits that meet all requirements of ISO/IEC 17025:2017 and ISO 9001:2015 standards. The samples were dried, crushed to 70% passing < 2 mm, split using riffle splitter, and a 1 kg subsample was pulverized to 85% passing 75 microns.

Au was analyzed by fire assay on a 50 g aliquot with an AAS finish (method Au-AA26). Samples above the upper limit of detection of 100.0 ppm were reanalyzed by fire assay on a 50 g aliquot with a gravimetric finish (method Au-GRA22).

# **11.2 SPECIFIC GRAVITY SAMPLING**

A total of 250 SG measurements were provided from the Company using the Archimedes method which measures the weight of the core in air versus the weight in water by applying the following formula:

$$Specific \ Gravity = \frac{Weight \ in \ Air}{(Weight \ in \ Air - Weight \ in \ Water)}$$

Average SG measurements for lithology type are provided in Section 10.

# 11.3 QUALITY ASSURANCE/QUALITY CONTROL PROGRAMS

Quality control ("QC") measures were set in place to ensure the reliability and trustworthiness of exploration data. These measures include written field procedures and independent verifications of aspects such as drilling, surveying, sampling and assaying, data management and database integrity. Appropriate documentation of quality control measures and regular analysis of QC data are essential as a safeguard for project data and form the basis for the quality assurance ("QA") program implemented during exploration.

Analytical QC measures involve internal and external laboratory procedures implemented to monitor the precision and accuracy of the sample preparation and assay data. They are also important to identify potential sample sequencing errors and to monitor for contamination of samples.

Sampling and analytical QA/QC protocols typically involve taking duplicate samples and inserting quality control samples (CRM and blanks) to monitor the reliability of the assay results throughout the drill program. Umpire check assays are typically performed to evaluate the primary lab for bias and involve reassaying a set proportion of sample rejects and pulps at a secondary umpire laboratory.

# **11.3.1** HISTORICAL PROGRAMS

# 11.3.1.1 1987-1988 SEABRIGHT

Assay analysis for Seabright was completed at Chemlab Inc. in Saint John, NB. The entire core sample was dried, crushed, and pulverized to 90% -100 mesh. The sample was then split to obtain a 500-1000 g assay pulp. Analysis was completed using a 30 g sample and fire assay with AAS finish. QA/QC protocol for regular core samples included processing in batches of 20 including: 17 samples, 1 duplicate, 1 blank, and 1 reference. QA/QC samples are not listed in the logs and are not identified in lab certificates. The report does not describe the blank material used nor does it list the reference samples.

# 11.3.1.2 1993-1995 DUFFERIN RESOURCES

Assay analyses for Dufferin resources were completed by Bondar-Clegg Testing Services in Elmsdale, NS. Samples were crushed in their entirety to below 10 mesh. Core samples were screened at 20, 60, and 100 mesh. -100 mesh material was rolled and split to 200 g sample sizes and sent for fire assay with an AAS finish. No lab QAQC information is recorded.

## 11.3.1.3 1999 Newfoundland Goldbar Resources Inc.

Based on reports completed for the company it is implied that proper QA/QC procedures were employed. This includes inserting 1 duplicate, 1 blank and 1 standard per 20 samples. No CRM's are specifically mentioned. It is also mentioned that the laboratory used for assay analysis at the time employed their own standard and blank samples to ensure laboratory QA/QC was up to standard.

## 11.3.1.4 2004 AZURE

No QA/QC information recorded.

## 11.3.1.5 2008-2014 Ressources Appalaches Inc.

No QA/QC information recorded.

## 11.3.1.6 2017 RESOURCE CAPITAL GOLD CORP/MARITIME DUFFERIN

No QA/QC insertion information recorded.

## 11.3.2 AURELIUS MINERALS INC. 2020-2021

The Company inserted one of four CRMs (Table 11-1), one coarse blank and one field duplicate in every batch of 50 samples. The Company had a dedicated database geologist who monitored the analytical results on receipt and produced written and graphic monthly reports.

## 11.3.2.1 STANDARDS

The Company submitted 330 CRMs between 2020 and 2021 as part of their QA/QC process for the Phase 1 and Phase 2 drill programs. The CRM results are summarized in Table 1-1 and Figure 11-2 through Figure 11-5. OREAS 299 is a high grade standard, which had several lab failures. This is due to the high grade of the standard; error with an atomic absorption spectrometry finish is excessive due to high end detection limits. For error to be reduced the standard would have to be run with a gravimetric finish. Therefore, the results for the standard are within reasonable allowance based on the analysis method. It is the intention of the Company to re-assay failed standards/blanks five samples previous and five samples after and the QA/QC sample again. No other significant biases were evident.

Standard	Count	Certified Reference Value Au (g/t)	Mean Assay Value Au (g/t)	Acceptable Standard Deviation
OREAS 239	171	3.55	3.53	0.086
OREAS 299	4	89.97	91.20	2.232
OREAS 235	87	1.59	1.57	0.038
CDN-GS-1U	68	0.968	0.97	0.043

Table 11-1: CRM Result Summary

Source: Nordmin, 2022

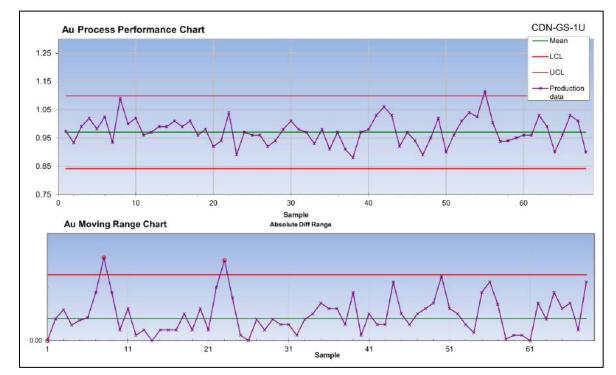


Figure 11-2: Deposit standard CDN GS-1U Au (ppm)

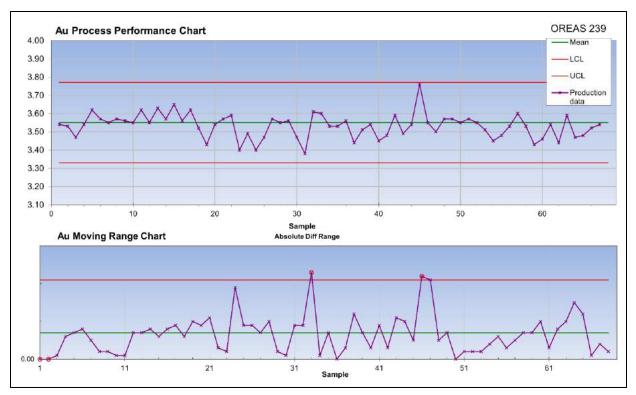


Figure 11-3: Deposit standard OREAS 239 Au (ppm)

Source: Nordmin, 2022

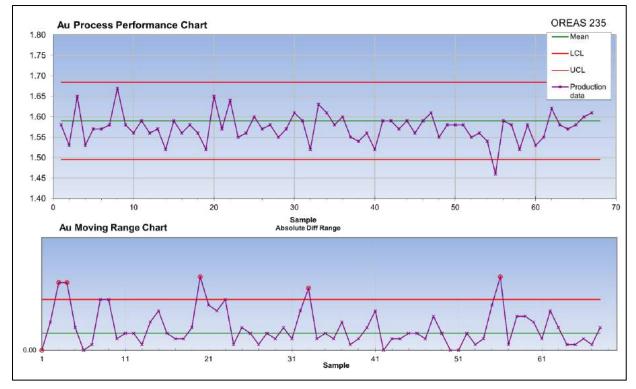


Figure 11-4: Deposit standard OREAS 235 Au (ppm)

Source: Nordmin, 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

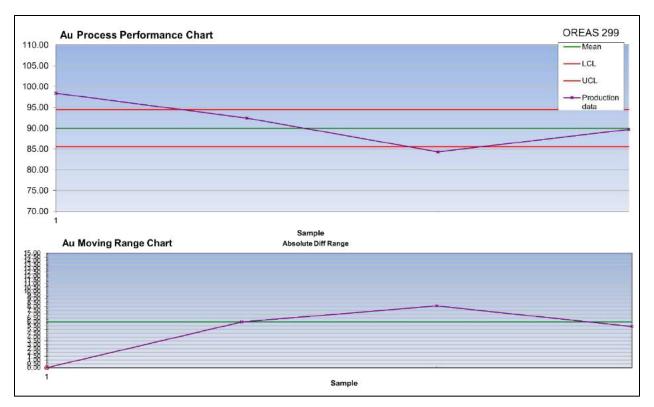


Figure 11-5: Deposit standard OREAS 299 Au (g/t)

### **11.3.3** AURELIUS MINERALS INC. BLANKS

The Company submitted 475 coarse blanks between 2020 and 2022 as part of its QA/QC process. No significant carryover is evident (Figure 11-6).

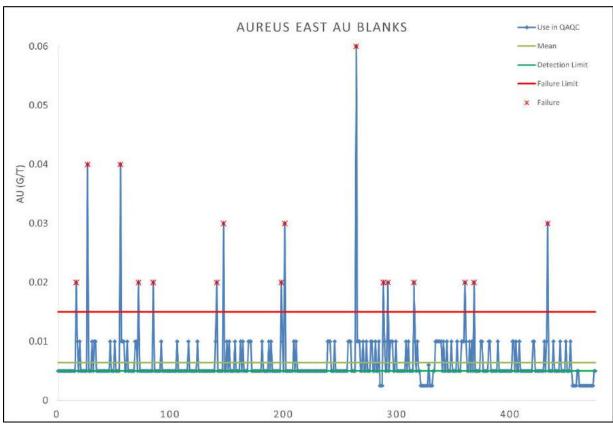


Figure 11-6: Deposit Au (g/t) blanks

Source : Nordmin 2022

## **11.3.4 FIELD AND LABORATORY DUPLICATES**

The Company submitted 369 Au core duplicates, as part of their QA/QC process. Field duplicate pair results show high variability for Cu and much less for Au (Figure 11-7). Duplicate pairs for Au show moderate variability. This can be attributed to the nugget effect within the Project where one sample may contain a greater concentration of gold due to uneven distribution within the core piece. ALS Laboratories submitted 1,360 internal duplicate samples as a part of their standard QA/QC procedures (Figure 11-8). Duplicate pairs for Au show great agreement.

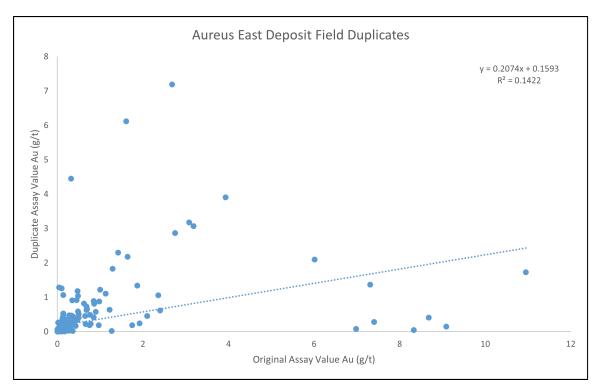


Figure 11-7: Field duplicates for Au (g/t)

Source: Nordmin, 2022

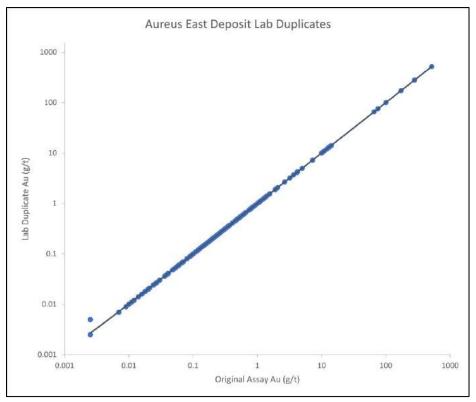


Figure 11-8: ALS Laboratories internal laboratory pulp duplicates, Au (g/t)

Source: Nordmin, 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

### 11.3.5 UMPIRE CHECKS

Umpire checks are completed once on an annual basis. Only umpire checks for the Phase 1 drilling program have been completed. Umpire check assays are currently being analyzed at AGAT Laboratories in Mississauga which is accredited to the ISO/IEC 17025:2017 and ISO 9001:2015 standards.

### **11.4 SAMPLE SECURITY**

Sample bags are sealed with zip ties to ensure sample integrity and securely shipped to ALS laboratories for analysis. On site storage of both historic and current drill core (Figure 11-9 and Figure 11-10:), pulps and coarse rejects are well maintained and labeled (Figure 11-11: through Figure 11-13:). Coarse rejects are stored on pallets, with historic materials stored within 5-gallon pails and the more recently drilled materials being stored in rice bags and plastic wrapped. Batch numbers and sample numbers are labelled onto each of the pallets.



Figure 11-9: Coarse storage area; core stored in racks



Figure 11-10: Core storage area, cross-piled onto pallets

Source: Nordmin, 2022



Figure 11-11: Coarse reject storage



Figure 11-12: Coarse reject storage labels Source: Nordmin, 2022

Pulps are stored in a small building adjacent to the reject storage area (Figure 11-13). Pulps are within boxes which are also labeled by batch number and show sample numbers included in each box.



Figure 11-13: Pulp storage

# 11.5 QP's OPINION

Nordmin has been supplied with all raw QA/QC data and has reviewed and completed an independent check of the results for all Project sampling programs. It is Nordmin's opinion that the sample preparation, security and analytical procedures used by all parties are consistent with standard industry practices and that the data is suitable for the 2022 MRE. Nordmin identified several further recommendations to Aurelius to ensure the continuation of a robust QA/QC program but has noted that there are no material concerns with the geological or analytical procedures used or the quality of the resulting data.

# **12 DATA VERIFICATION**

Nordmin completed several data validation checks throughout the duration of the 2022 MRE. The verification process included a site visit to the Project in Nova Scotia by the Nordmin QP to review surface geology, historic underground workings, drill core geology, geological procedures, chain of custody of drill core, sample pulps, and for the collection of independent samples for metal verification. Data verification included a survey spot check of drill collars, a spot check comparison of Au assays from the drill hole database against original assay records (lab certificates), spot check of drill core lithologies recorded in the database versus the core located in the core storage shed and a review of QA/QC performance of the drill programs. Nordmin has also completed additional data analysis and validation, as outlined in Section 11.

## 12.1 NORDMIN SITE VISIT 2022

A site visit to the Project was carried out on June 21<sup>st</sup> and 22<sup>nd</sup>, 2022 by Christian Ballard, P.Geo., QP. Mr. Ballard was accompanied by Billy Grace, P.Eng and Morgan Verge, P.Geo of Aureus, both of whom have collectively been involved with the Project for multiple years. Activities during the site visit included:

- Review of the geological and geographical setting of the Project.
- Review and inspection of the site geology, mineralization, and structural controls with respect to gold distribution.
- Review of the drilling, logging, sampling, analytical, and QA/QC procedures.
- Review of the chain of custody of samples from the field to the assay lab.
- Review of the drill logs, drill core, storage facilities, and independent assay verification on selected core samples.
- Confirmation of a variety of drill hole collar locations.
- Validation of a portion of the drill hole database.
- Review of previous underground mining areas and an overall site audit.
- Review of mineralization.

Company geologists completed the core logging and sampling associated with the drill programs. Nordmin used the Company's database to review the core logging procedures, the collection of samples, and the chain of custody associated with the drilling and sampling programs.

#### 12.1.1 OBSERVATIONS

Site visit observations are as follows:

- Core logging is completed using MX Deposit software. Geologists enter data for lithology, mineralization, structure, alteration as well as RQD and recoveries. There is a live MX Deposit visualization tool displayed on a monitor in the core logging area that displays the hole updates, an excellent addition.
- Core logging occurs within the core logging trailer area (Figure 12-1 and Figure 12-2).
- Core cutting and bagging occurs within a separate building (Figure 12-3) from the core shack, lessening the possibility of cross-contamination of core samples.

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.



Figure 12-1: Core shack Source: Nordmin 2022



Figure 12-2: Core logging (grey trailer on right) and core cutting facilities (red trailer on left) Source: Nordmin 2022



Figure 12-3: Vancon core cutting saw in the core cutting building Source: Nordmin 2022

- QA/QC samples are inserted at a rate of one blank, one standard, and one field duplicate per 50 samples.
- Assay analysis is carried out by ALS Laboratories. The samples are first shipped to the preparation lab in New Brunswick before being shipped for assaying at whichever lab currently has the capacity within the ALS system.
- On-site QA/QC reporting is completed on a quarterly basis. Initial QA/QC analysis is handled by an off-site geologist who runs the analysis on a sample batch to batch basis.
- Lab referee checks are also completed on a quarterly basis, on average 5% of the total assays taken during a quarter are sent to AGAT laboratories for comparison assays.
- Gold mineralization is associated with quartz +/- carbonate veining within the saddle (Figure 12-4) and limb (Figure 12-5) portions of the anticlinal feature that defines the Project. Historically, the limbs were not tested in any significant manner. Argillite beds in and around the veining features (specifically along the footwall contacts) also contain gold mineralization (Figure 12-7 and Figure 12-8).



Figure 12-4: Veined/mineralized saddle at the 1006 level

Source: Nordmin 2022



Figure 12-5: Mined out portion of both limb at the 905 level Source: Nordmin 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.



Figure 12-6: Opened mineralized fold limb with mineralized quartz-carbonate veining, argillite, and associated alteration below the 920 level Source: Nordmin 2022



Figure 12-7: Mineralized argillite along footwall contact of veining structure Source: Nordmin 2022



Figure 12-8: Visible Gold in hand sample along footwall contact with Argillite Source: Nordmin 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

- Cross cutting veining features are typically barren; however, where these structures encounter the primary saddle/limb veins, an increase in grade is noted by geologists on site.
- Ongoing channel sampling has been performed and has helped with defining the continuity of mineralization. Samples are taken perpendicular to the belts (Figure 12-9). Channels should be extended at least 1 m into surrounding rock wherever possible and whenever ground control allows.



Figure 12-9: Channel sample containing visible gold

Source: Nordmin 2022

## 12.1.2 FIELD COLLAR VALIDATION

Nordmin was able to locate several drill collars from multiple drilling campaigns within the field during the field visit. A total of 11 drill collar sites were visited during the site visit (Figure 12-10 and Table 12-1). Collar coordinates were measured using a hand-held GPS unit and then compared to the official collar information within the drill hole database. No significant discrepancies were identified. Figure 12-11 is a typical example of what was observed of collars in the field during the site visit.



Figure 12-10: Collar Validation

Source: Nordmin, 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

Table 12-1: I	Drill Collar	Coordinate	Validation
---------------	--------------	------------	------------

	Nordr	nin-Surveyed (	Collars	Database Collars			Difference			
Drill Hole	Easting	Northing	Elevation	Easting	Northing	Elevation	Easting	Northing	Elevation	
AE-21-020	547,986.4	4,979,834.0	46.2	547,989.0	4,979,828.8	51.2	+2.6	-5.2	+5.0	
AE-21-026	547,986.4	4,979,836.1	47.2	547,989.6	4,979,830.8	51.3	+3.2	-5.3	+4.1	
AE-21-034	548,135.1	4,980,039.6	49.0	548,138.5	4,980,038.1	53.5	+3.4	-1.5	+4.5	
AE-21-035	548,133.1	4,980,050.0	47.5	548,135.6	4,980,049.2	53.5	+2.5	-0.7	+6.0	
AE-21-036	548,150.8	4,979,997.2	42.8	548,154.0	4,979,993.0	47.1	+3.2	-4.2	+4.3	
AE-21-039	548,173.6	4,980,003.6	43.7	548,176.9	4,979,999.0	45.5	+3.3	-4.6	+1.8	
AE-21-040	548,173.6	4,980,003.6	43.7	548,177.3	4,979,999.0	45.5	+3.7	-4.6	+1.8	
AE-21-043	548,090.0	4,979,928.8	44.7	548,092.7	4,979,924.8	47.6	+2.7	-3.9	+3.0	
F09-06	548,074.8	4,980,013.3	54.2	548,072.1	4,980,011.4	54.3	-2.7	-1.9	+0.1	
F09-07	548,074.8	4,980,013.5	57.0	548,072.7	4,980,011.4	54.3	-2.7	-1.9	+2.7	
F14-13	548,149.6	4,980,040.5	46.5	548,152.3	4,980,039.4	50.8	+2.2	-1.1	+4.3	
F14-14	548,148.7	4,980,044.4	47.2	548,152.3	4,980,034.9	50.5	+3.6	-9.5	+3.3	



Figure 12-11: Typical field collar site Source: Nordmin 2022

#### 12.1.3 CORE LOGGING, SAMPLING AND STORAGE FACILITIES

Drill holes were logged, photographed, and sampled on-site at the core logging facility. Most of the core is stored on-site, and the samples, pulps, and coarse rejects are archived in secure storage facilities (Figure 12-12 to Figure 12-14).



Figure 12-12: Core logging station

Source: Nordmin 2022



Figure 12-13: Core storage facilities



Figure 12-14: Samples ready for shipping

Source: Nordmin 2022

## 12.1.4 INDEPENDENT SAMPLING

The Nordmin QP selected a total of 119 samples from 13 diamond drill holes. A combination of half core, quarter core, coarse rejects, and pulp rejects were selected for re-sampling. Nordmin elected to choose a variety of grade ranges from various drill holes (Table 12-2).

## Table 12-2: Independent Sampling

Hole Number	From	То	Original Sample ID	Check Sample ID	Original Au (g/t)	Check Au (g/t)
AE-20-003	28.5	29.5	C738494	B485779	0.03	0.03
AE-20-003 AE-20-003	29.5	30.7	C738495	B485781	0.32	0.4
AE-20-003 AE-20-003	30.7 32	32 32.5	C738496 C738497	B485782 B485783	10.6 20.9	1.26 21.1
AE-20-003	32.5	33.05	C738497	C105029	7.03	14.25
AE-20-003	33.05	33.55	C738499	B485786	1.61	2.29
AE-20-003	33.55	34	C738500	B485787	0.55	0.07
AE-20-003	34	35.5	D849801	B485788	0.11	0.1
AE-20-006	173	174	D849802	C093810	0.03	0.02
AE-20-006	174	174.9	D849803	C093811	2.54	0.25
AE-20-006	174.9	175.7	D849804	C093812	5.53	1.94
AE-20-006	175.7	177	D849805	C093813	0.72	0.86
AE-20-006	177	178.35	D849806	C093814	0.34	0.36
AE-20-006	178.35	179	D849807	C093815	1.55	0.15
AE-20-006	179	180	D849808	C093816	0.07	0.04
AE-20-007	30	30.8	D849809	C093905	0.04	0.02
AE-20-007	30.8	31.6	D849810	C093906	0.63	0.51
AE-20-007	31.6	32.35	D849811	C093907	1.01	1.73
AE-20-007	32.35	33	D849812	C093908	1.65	2.59
AE-20-007	33	34	D849813	C093910	0.08	0.1
AE-20-007 AE-20-007	168.75 169.3	169.3 170	D849814 D849815	B486943 B486944	0.62	1.82 0.22
AE-20-007 AE-20-007	169.3	170.85	D849815 D849816	B486944 B486945	1.17	2.84
AE-20-007	170.85	170.85	D849810	B486946	1.17	0.7
AE-20-007	171.5	172.5	D849818	B486947	0.98	0.69
AE-20-007	172.5	173.5	D849819	B486948	1.58	0.49
AE-20-007	173.5	174.5	D849820	B486949	0.17	0.15
AE-21-013	177.5	178.2	D849821	C105571	0.02	0.03
AE-21-013	178.2	179.05	D849822	C105572	2.35	0.47
AE-21-013	179.05	179.75	D849823	C105573	0.13	0.33
AE-21-013	179.75	180.5	D849824	C105574	0.31	0.1
AE-21-013	180.5	181.5	D849825	C105575	0.82	0.24
AE-21-013	181.5	182.5	D849826	C105576	0.19	0.05
AE-21-013	182.5	183.4	D849827	C105577	0.04	0.03
AE-21-013	183.4	184.15	D849828	C105578	0.07	0.25
AE-21-013	184.15	185	D849829	C105579	0.17	0.26
AE-21-013 AE-21-013	185 186	186 186.5	D849830 D849831	C105581 C105582	5.27 2.03	0.43
AE-21-013 AE-21-013	186.5	180.5	D849831 D849832	C105582	0.51	0.92
AE-21-013	187.5	188.5	D849833	C105584	0.73	0.62
AE-21-013	188.5	189.5	D849834	C105585	0.14	0.17
AE-21-021	198.05	198.9	D849868	C106176	0.07	0.06
AE-21-021	198.9	199.6	D849869	C106177	6.5	1.46
AE-21-021	199.6	200.25	D849870	C106178	0.22	0.36
AE-21-021	200.25	201	D849871	C106179	0.11	0.11
AE-21-021	201	201.75	D849872	C106181	0.56	0.6
AE-21-021	201.75	202.3	D849873	C106182	0.32	0.22
AE-21-021	202.3	203	D849874	C106183	0.36	0.28
AE-21-021	203	204.5	D849875	C106184	0.1	0.08
AE-21-029	35	35.8	D849880	C107062	0.08	0.14
AE-21-029	35.8	36.5	D849881	C107063	1.2	0.26
AE-21-029 AE-21-029	36.5 108.6	37.1 109.1	D849882 D849883	C107064 C107085	0.21	0.3 0.005
AE-21-029 AE-21-029	108.6	109.1	D849883 D849884	C107085	4.47	10.45
AE-21-029 AE-21-029	109.1	110.65	D849884 D849885	C107088	0.37	0.34
AE-21-029	105.8	142.3	D849886	C107098	0.19	2.26
AE-21-029			D849887	C107099	13.5	0.83
AE-21-029	142.3	143	0040007			
AE-21-029	142.3 143	143 143.8	D849888	C107100	10.15	7.7
AE-21-037					-	7.7 0.02
	143	143.8	D849888	C107100	10.15	
AE-21-037	143 143.8 27.5 28.5	143.8 144.8 28.5 29.5	D849888 D849889 D849899 D849900	C107100 C107101	10.15 0.02 0.1 0.37	0.02
AE-21-037	143 143.8 27.5 28.5 29.5	143.8 144.8 28.5 29.5 30.5	D849888 D849889 D849899 D849900 D849751	C107100 C107101 C737785 C737786 C737787	10.15 0.02 0.1 0.37 1.71	0.02 0.19 0.21 0.74
AE-21-037 AE-21-037	143 143.8 27.5 28.5 29.5 30.5	143.8 144.8 28.5 29.5 30.5 31.1	D849888 D849889 D849899 D849900 D849751 D849752	C107100 C107101 C737785 C737786 C737787 C737788	10.15           0.02           0.1           0.37           1.71           0.12	0.02 0.19 0.21 0.74 0.17
AE-21-037 AE-21-037 AE-21-037	143 143.8 27.5 28.5 29.5 30.5 31.1	143.8 144.8 28.5 29.5 30.5 31.1 32.2	D849888 D849889 D849899 D849900 D849751 D849752 D849753	C107100 C107101 C737785 C737786 C737787 C737788 C737789	10.15           0.02           0.1           0.37           1.71           0.12           0.36	0.02 0.19 0.21 0.74 0.17 0.16
AE-21-037 AE-21-037 AE-21-037 AE-21-037	143 143.8 27.5 28.5 29.5 30.5 31.1 32.2	143.8 144.8 28.5 29.5 30.5 31.1 32.2 32.7	D849888 D849889 D849899 D849900 D849751 D849752 D849753 D849754	C107100 C107101 C737785 C737786 C737787 C737788 C737788 C737789 C737791	10.15 0.02 0.1 0.37 1.71 0.12 0.36 0.25	0.02 0.19 0.21 0.74 0.17 0.16 0.32
AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037	143 143.8 27.5 28.5 29.5 30.5 31.1 32.2 32.7	143.8 144.8 28.5 29.5 30.5 31.1 32.2 32.7 33.4	D849888 D849889 D849899 D849900 D849751 D849752 D849753 D849754 D849755	C107100 C107101 C737785 C737786 C737787 C737788 C737789 C737791 C737792	10.15           0.02           0.1           0.37           1.71           0.12           0.36           0.25           0.23	0.02 0.19 0.21 0.74 0.17 0.16 0.32 0.54
AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037	143 143.8 27.5 28.5 29.5 30.5 31.1 32.2 32.7 33.4	143.8 144.8 28.5 29.5 30.5 31.1 32.2 32.7 33.4 34.3	D849888 D849889 D849899 D849900 D849751 D849752 D849753 D849754 D849755 D849756	C107100 C107101 C737785 C737786 C737787 C737788 C737789 C737789 C737791 C737792 C737793	10.15           0.02           0.1           0.37           1.71           0.12           0.36           0.25           0.23           4.86	0.02 0.19 0.21 0.74 0.17 0.16 0.32 0.54 3.65
AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037	143 143.8 27.5 28.5 29.5 30.5 31.1 32.2 32.7 33.4 34.3	143.8 144.8 28.5 29.5 30.5 31.1 32.2 32.7 33.4 34.3 35	D849888 D849889 D849899 D849900 D849751 D849752 D849753 D849754 D849755 D849756 D849757	C107100 C107101 C737785 C737786 C737787 C737788 C737789 C737791 C737791 C737792 C737793 C737794	10.15           0.02           0.1           0.37           1.71           0.12           0.36           0.25           0.23           4.86           1.14	0.02 0.19 0.21 0.74 0.17 0.16 0.32 0.54 3.65 1.37
AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037	143 143.8 27.5 28.5 29.5 30.5 31.1 32.2 32.7 33.4 34.3 35	143.8 144.8 28.5 29.5 30.5 31.1 32.2 32.7 33.4 34.3 35 35.6	D849888 D849889 D849899 D849900 D849751 D849752 D849753 D849754 D849755 D849755 D849756 D849757 D849758	C107100 C107101 C737785 C737786 C737787 C737788 C737789 C737789 C737791 C737791 C737792 C737793 C737793 C737795	10.15           0.02           0.1           0.37           1.71           0.12           0.36           0.25           0.23           4.86           1.14           0.36	0.02 0.19 0.21 0.74 0.17 0.16 0.32 0.54 3.65 1.37 0.34
AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037	143 143.8 27.5 28.5 29.5 30.5 31.1 32.2 32.7 33.4 34.3 35 35.6	143.8 144.8 28.5 29.5 30.5 31.1 32.2 32.7 33.4 34.3 35 35.6 36	D849888 D849889 D849899 D849900 D849751 D849752 D849753 D849754 D849755 D849755 D849756 D849757 D849758 D849759	C107100 C107101 C737785 C737786 C737787 C737788 C737789 C737791 C737791 C737792 C737793 C737793 C737794 C737795 C737796	10.15         0.02         0.1         0.37         1.71         0.12         0.36         0.25         0.23         4.86         1.14         0.36         0.36	0.02 0.19 0.21 0.74 0.17 0.16 0.32 0.54 3.65 1.37 0.34 0.24
AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037 AE-21-037	143 143.8 27.5 28.5 29.5 30.5 31.1 32.2 32.7 33.4 34.3 35	143.8 144.8 28.5 29.5 30.5 31.1 32.2 32.7 33.4 34.3 35 35.6	D849888 D849889 D849899 D849900 D849751 D849752 D849753 D849754 D849755 D849755 D849756 D849757 D849758	C107100 C107101 C737785 C737786 C737787 C737788 C737789 C737789 C737791 C737791 C737792 C737793 C737793 C737795	10.15           0.02           0.1           0.37           1.71           0.12           0.36           0.25           0.23           4.86           1.14           0.36	0.02 0.19 0.21 0.74 0.17 0.16 0.32 0.54 3.65 1.37 0.34

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

Hole Number	From	То	Original Sample ID	Check Sample ID	Original Au (g/t)	Check Au (g/t)
AE-21-038	76.3	76.9	D849895	C736639	0.25	0.24
AE-21-038	76.9	77.65	D849896	C736640	4.3	0.58
AE-21-038	77.65	78.65	D849897	C736641	1.55	0.1
AE-21-038	78.65	79.65	D849898	C736642	0.02	0.02
AE-21-040	158.7	159.5	D849876	C737214	0.02	0.01
AE-21-040	159.5	160	D849877	C737215	0.06	0.16
AE-21-040	160	160.65	D849878	C737216	40.3	39.4
AE-21-040	160.65	161.65	D849879	C737218	0.08	0.11
F10-27	81	81.7	D849835	720317	16.1	14.55
F10-27	81.7	82	D849836	720321	0.81	1.08
F10-27	82	83	D849837	720322	0.76	0.76
F10-27	83	83.9	D849838	720323	0.5	0.74
F10-27	83.9	84.2	D849839	720324	0.04	0.03
F10-27	84.2	85	D849840	720325	0.3	0.68
F10-27	97	97.6	D849841	720326	0.04	0.05
F10-27	97.6	98.7	D849842	720327	1.26	2.76
F10-27	98.7	99.35	D849843	720328	0.55	0.45
F10-27	99.35	99.65	D849844	720329	0.28	0.22
F10-27	99.65	100	D849845	720330	0.03	0.05
F14-01	28.3	28.63	D849846	J721003	0.1	0.25
F14-01	28.63	29.2	D849847	J721005	1.71	0.49
F14-01	29.2	29.65	D849848	J721006	0.16	0.03
F14-01	29.65	30.4	D849849	J721007	0.77	0.55
F14-01	30.4	30.65	D849850	J721010	0.03	0.03
F14-01	31.5	31.97	D849851	J721011	1.13	5.59
F14-01	31.97	32.22	D849852	J721012	0.07	0.04
F14-01	35.35	35.6	D849853	J721013	0.14	36.5
F14-01	36.1	36.35	D849854	J721015	5.44	1.49
F14-01	36.35	37.2	D849855	J721016	1.65	0.69
F14-01	37.2	37.6	D849856	J721017	0.06	0.02
F14-07	27.56	27.95	D849857	J721150	1.63	0.06
F14-07	27.95	28.15	D849858	J721151	0.18	0.07
F14-07	28.15	28.5	D849859	J721152	3.12	9.42
F14-07	28.5	28.9	D849860	J721153	0.3	0.31
F14-07	31.1	31.5	D849861	J721155	0.23	0.23
F14-07	31.5	31.8	D849862	J721156	33.5	1.25
F14-07	31.8	32.15	D849863	J721158	0.12	0.12
F14-07	33.55	33.85	D849864	J721159	0.03	0.02
F14-07	33.85	34.5	D849865	J721160	0.05	0.03
F14-07	34.5	34.9	D849866	J721161	0.48	0.39
F14-07	34.9	35.4	D849867	J721162	0.03	0.04
UG-17-02	34.6	35.6	D849890	B482911	0.048	0.06
UG-17-02	35.6	36.4	D849891	B482912	0.534	0.51
UG-17-02	36.4	36.9	D849892	B482913	0.357	0.33
UG-17-02	52.5	52.94	D849893	B482919	0.585	0.52
UG-17-02	52.94	53.4	D849894	B482920	0.04	0.05

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

Samples selected by Nordmin for verification analysis were individually placed into plastic sample bags which were then packaged together and shipped to a prep laboratory in New Brunswick and then onto ALS Laboratory in Vancouver, Canada. Samples were analyzed using the Company's analytical procedures.

The Nordmin assay results were compared to the Company database and summarized in a scatter plot for Au (Figure 12-15). Despite some sample variance, most assays compared within reasonable tolerances for the deposit type and no material bias was evident.

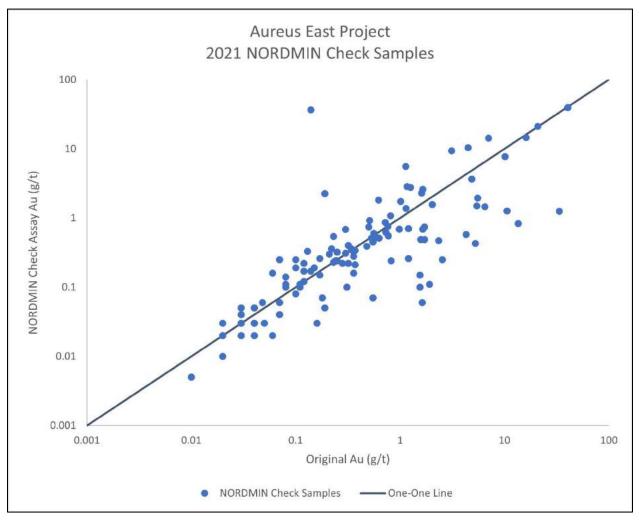


Figure 12-15: Scatter plot comparison of independent sampling results (Au g/t, logarithmic scale) Source: Nordmin 2022

# **12.2 DATABASE VALIDATION**

Core sample records, lithology logs, laboratory reports, and associated drill hole information for all drill programs were digitally compiled for use in Leapfrog Geo<sup>™</sup> and Datamine Studio RM<sup>™</sup> software for deposit modelling and resource estimation.

Drill hole data from 2020 to present has been compiled into MX Deposit and directly exported into comma-separated values tables. Nordmin reviewed the database using  $Excel^{TM}$ , Datamine Studio  $RM^{TM}$ , and  $QGIS^{TM}$  software. No errors or discrepancies were found within the drill hole database.

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

The QP completed a spot check verification on the Project for:

- 5 drill holes including all main lithologies, 33 geotechnical measurements, and 8% of the assays.
- No channel samples were reviewed

The geology was validated by comparing lithologic units from MX Deposit with stored half core and are deemed acceptable for use by QP.

# 12.3 REVIEW OF AURELIUS QA/QC

Aurelius has a robust QA/QC process in place, as described in Section 11 and 12. The Company geologists actively monitor the assay results throughout the drill programs and summarize the QA/QC results in weekly/monthly reports. A number of failures for standard and blank reference materials were documented, resulting in re-assay of entire sample batches. Most of the CRMs performed as expected within tolerances of two to three standard deviations of the mean grade. Nordmin is satisfied that the QA/QC process is performing as designed to ensure the quality of the assay data.

# 12.4 QP's OPINION

Upon completion of the data verification process, it is the Nordmin QP's opinion that the geological data collection and QA/QC procedures used by Aurelius are consistent with standard industry practices and that the geological database is of suitable quality to support the Mineral Resource.

# **13 MINERAL PROCESSING AND METALLURGICAL TESTING**

## **13.1 INTRODUCTION AND SUMMARY**

Metallurgical testing has not yet been completed by the Company. Several past operators have completed metallurgical testing; the results of these studies are described here.

## 13.2 1993 CORNER BAY MINERALS

During December 1993, Corner Bay Minerals excavated approximately ten tonnes of quartz vein material as a bulk sample. Three to four tonnes of this material was delivered to the Minerals Engineering Centre of the Technical University of Nova Scotia for metallurgical test work. The Technical University of Nova Scotia then proceeded to send 300 kg of crushed material to M-Tech Incorporated of Elmsdale, Nova Scotia. The coarse crushed material was further broken down to -60 mesh by use of jaw, cone, and roll crushers. A split of this material was processed by use of Knelson-Mozley-Separation with a recovery rate of 92%. The head grade was 15.14 g/t Au.

## 13.3 2000-2001 NEWFOUNDLAND GOLDBAR RESOURCES

In September 2000, Newfoundland Goldbar Resources changed the Dufferin Resources mill from a jig unit to a high-centrifugal apparatus and added a bullion furnace. An impact crusher and two Falcon concentrators were added. Screens, slurry pumps and an air compressor were also installed.

In 2001, Newfoundland Goldbar tested a bulk sample in three test lots:

- Test #1 was an initial mill test of 10,000 tonnes with gravity separation and resulted in "poor recovery".
- Test #2, also of 10,000 tonnes used a form of impact grinding but also had poor recovery.
- Test #3 added a ball mill for grinding, improving recovery to 77.6%.

Reported mineral extraction for 2001 was 55,172 tonnes milled and 7,397 ounces of gold poured, with an estimated 200 ounces remaining in the circuits and 2,191 ounces in the tailings (based on a tailings grade of 1.7 g/tonne). Estimated recovery was 77.6%.

## 13.4 2003 AZURE RESOURCES

During 2003, Azure Resources conducted test work for the reprocessing of tailings remaining from the previous operations. Tailings samples had an average grade of approximately 4 g/t Au with a range from 1.5 g/t to 33 g/t Au. The work was completed by MineTech International Limited at Dalhousie University's Mineral Engineering Centre. Twenty-two samples were taken from the tailings pond at various depths and each sample was split into two equal portions with a sample splitter. One portion was forwarded to Knelson Gravity Solutions in Langley B.C. and a portion of each of the remaining 22 samples was taken and assayed for gold. The samples were then split into sixteen, 2,000 g samples for flotation testing.

This mineralised rock was found to be very hard. A ten minute grind produced a product of 40% at 200mesh and another 30 minutes of grinding only increased the product to 55% at 200-mesh. The finer grinds improved recovery but also created much more surface area which required more collector to recover the gold. Cleaner flotation achieved 91. 5% recovery with a grade of 700 g/t. The twenty-two tailings samples sent to Knelso Gravity Solutions were assessed for gravity concentration. The test sample was processed through a 3-inch Knelson Concentrator ("KC") at an RPM set to produce the equivalent of 60 G-force. The primary objective of this test work was to determine if the gold contained within the samples was readily recoverable through gravity concentration. The samples were individually mixed and split to form a 3.7 kg composite for processing. The remaining samples were rebagged and stored. At the end of the concentration stage, the concentrate was washed from the inner cone of the KC and panned to produce concentrate and tailings (middlings) samples. The concentrate and tailings samples were labelled, dried, weighed and sent to an independent local lab for assaying. The recovery for the single pass test was 56.5% in a concentrate of 2.2% of the starting material. The calculated feed grade of the sample was 2.61 g/t gold. No microscopic analysis of the concentrate was performed.

Azure Resources submitted a 100 kg coarse mineralised rock sample for gravity concentration test work. The primary objective of this test work was to determine the gravity recoverable gold (GRG) content and the distribution of the GRG by particle size distribution. The GRG value is used as a basis for estimating actual gold recovery via mathematical modelling. With a head grade of 16.4 g/t Au, the overall GRG value was found to be 65.8% at a final grind of 75 microns (P80). First stage recovery of 35.5% indicated that gold is liberated in the crushing stage. Further grinding and recovery in stages 2 and 3 provide additional recoveries of 17.7% and 12.6%. No microscopic examination was performed on the concentrates. Gold was observed in the second panned concentrate with flakes as large as 1mm noted.

# 13.5 2006 JEMMA RESOURCES

In 2006, Jemma Resources made several alterations to the mill to re-process the tailings from previous operations. Eight, 300-cubic foot, Outokumpu flotation cells were installed for gold rougher flotation recovery; 12 Number-15 Denver Sub A flotation cells arranged for three stages of cleaning in a 5 - 4 - 3 arrangement were also installed and the balls in the ball mill were changed to one-inch diameter to better accommodate fine feed. Tailings were excavated and screened to remove rock and debris. The flotation cells were placed on staging so that concentrates could run by gravity to the individual pumps located on the bottom floor. The final concentrates were placed in large metal containers for drying. The gold concentrates in these containers were then manually shovelled into fibreglass two-tonne tote bags for shipment to the Belledune smelter in New Brunswick. The plant started operating on June 6th, 2006 and ceased operations on December 21st, 2006.

## 13.6 2009-2012 RESSOURCES APPALACHES

Ressources Appalaches carried out cyanidation, gravity and flotation mineral processing studies. Both studies were carried out using core samples. The cyanidation work, carried out at Laboratoire LTM Inc., achieved overall recoveries in the 98.6% to 99.6% range from a 19 kg sample.

Met-Solve Laboratories Inc. tested 52 kilograms of drill core using gravity concentration followed by flotation of the gravity tailings and were able to recover approximately 90% of the gold by gravity, and an overall recovery of approximately 99%. The grind size was approximately 120 microns and the Bond ball mill work index was 14.3 kWhr/tonne.

In January 2009, Laboratoire LTM of Val D'Or, Quebec, ran a series of tests on Ressources Appalaches diamond drill core rejects obtained from ALS Chemex Laboratory (Vancouver). The samples were a composite of 19 diamond drill samples that had been previously analysed for gold. The total sample weight was about 7 kilograms. The samples were ground to various amounts passing 200-mesh (75  $\mu$ ),

then leached with a cyanide solution to liberate the gold. Recovery averaged approximately 99%. The tails generally averaged less than 0.1 g/t. Laboratoire LTM concluded that the mineralised rock seems to have characteristics which are suitable for a process of direct cyanidation such as the Merrill-Crowe process. The gold tested appeared to be coarse. The consumption of cyanide might be reduced by gravity concentration of the gold after crushing.

In 2012, Met-Solve Laboratories of Langley, British Columbia, was contracted by Ressources Appalaches to perform metallurgical analyses, including gravity concentration tests, bond work index tests, froth flotation tests, and work on the leaching characteristics of the concentrates.

- The bond work index tests allowed the grinding capacity of existing on-site equipment to be estimated.
- Gravity concentration tests established the recoveries to be expected using a centrifugal concentrator.
- Froth flotation work helped determine optimum grind, reagents, and flotation kinetics for concentrating the mineralised rock by froth flotation.

For future consideration, leaching characteristics of the concentrates were also established. Testing of concentrates demonstrated that most of the gold can be recovered by gravity concentration to produce doré bullion by smelting on site. Testing was completed on the gravity tailings to assess whether additional recovery could be obtained by flotation. The anticipated high gold recovery by gravity and smelting on site meant that only a modest part of the production from the flotation stage would be subject to external smelter charges.

# 13.7 2017-2018 RESOURCE CAPTIAL GOLD CORP.

Resource Capital Gold Corp. refurbished the mill prior to their bulk sample program in 2017–2018, but no documentation is available regarding the changes that were made or the performance of the mill while it operated.

# **14 MINERAL RESOURCE ESTIMATES**

### **14.1 INTRODUCTION**

The Maiden Mineral Resource Estimate for the Project follows a two-phase drilling program consisting of 21,082 m of diamond drilling completed from 2020 to 2022. An additional 17 channels, including 131 individual channel samples, cross-cutting mineralization within 985 Ramp were completed in 2021 which assisted in confirming and refining the mineralogical, lithological, and structural controls of the Project.

The deposit style of the Project is that of a turbidite-hosted Meguma Terrane gold deposit. The Project is underlain by folded metasediments consisting of greywacke with minor interbedded argillite, and is comprised of a series of folded, gently east-plunging upright anticlines and synclines. To model the complex geometry of the mineralization, wireframes were created via detailed implicit modelling with Leapfrog Geo<sup>™</sup>. These also included a low-grade background wireframe for each of the five fault blocks, which equate to domains ("Domain"), which were truncated by four major faults transecting the Project. This wireframing was reviewed by Nordmin to confirm geological reasoning and to verify the wireframes. Assays were manually flagged to wireframes to ensure no assays were overlooked and that appropriate grade was assigned to the individual mineralized zones. The terminology hierarchy follows in Figure 14-1.

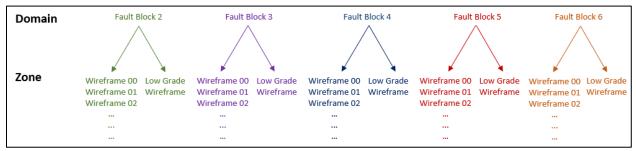


Figure 14-1: Terminology hierarchy

# **14.2 DRILL HOLE DATABASE**

The Mineral Resource Estimate was estimated from the main drill hole database comprised of 43,571 m of diamond drilling from 229 drill holes completed between 1987 and the end of 2021. Additionally, 131 channel samples consisting of 67.1 m from the 2021 underground sampling program were included in the estimate. Figure 14-2 and Figure 14-3 show drilling throughout the Project in relation to historic underground workings and the overburden Terrane. Table 14-1 presents a summary of drilling and chip sampling throughout the Project.

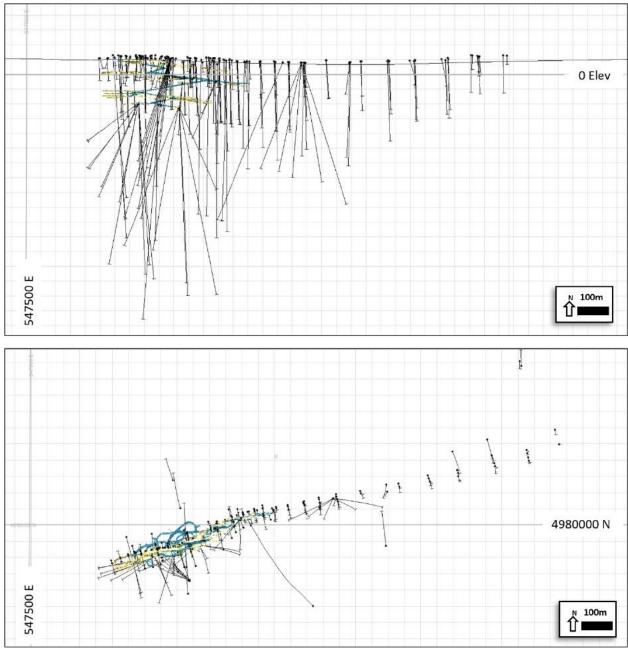


Figure 14-2: Deposit drilling looking north (top) and plan view (bottom) showing historic underground workings and overburden layer.

	Diamo	nd Drilling	Chip	Sampling
Year	Count	Length (m)	Count	Length (m)
1987-1988	35	3,232	-	-
1993	13	659	-	-
1995	8	120	-	-
1999	10	1,367	-	-
2004	6	618.17	-	-
2008-2010	73	11,622	-	-
2014	23	3,682	-	-
2017	9	1,190.6	-	-
2018	3	105.8	-	-
2020-2022	49	21,082	17	67.5

Table 14-1: Summary of samples from Diamond Drilling and Chip Sampling

## **14.3 GEOLOGICAL DOMAINING**

The Project lies within the Meguma Terrane ("Meguma"), the most southerly zone of the Canadian Appalachian province. The Meguma is historically associated with gold mineralization and mining in Nova Scotia. Geology within the Terrane consists of a thick sequence of lower Paleozoic metasediments intruded by Devonian granitoid plutons. The metasediments are divided into two formations: the Goldenville Formation and the Halifax Formation, which are folded into a series of upright anticlines and synclines. Geology at the Project is made up of the folded metasediments of the Goldenville Formation consisting mainly of greywacke with minor argillite, and the Halifax formation which is composed of black graphitic shale.

Mineralization at the Project is hosted within a large, gently east-plunging upright anticline. There are four significant faults within the Project which offset mineralization and create 5 distinct domains ("Domain"). The Project has a strike length of approximately 1600 m, a width of at least 200 m, and a depth of more than 900 m. Gold mineralization is associated with quartz within saddles and limbs, but is not restricted to only quartz veins. Gold bearing quartz-saddle veins occur within dilational zones within argillite units along the hinge of the fold axis. The saddle veins are milky-white to grey coarse crystalline containing thin layers of argillite and/or chlorite. Veining is typically thicker at the apex of the anticline. Quartz leg reef veins travel down the limbs of the anticline and create sharp contacts between the vein and argillite both in the hanging wall and the footwall. Gold mineralization is most commonly seen as free gold in fine films near crack-seal laminae, along vein-wall contacts, within sericite fractures, and as free gold within quartz veins.

Implicit mineralization wireframes were created for each of the 5 Domains based on the 4 regional faults that offset mineralization within the Project (Figure 14-3). 203 mineralized wireframe zones ("Zone") were created by modelling to assays that followed the interpreted quartz saddles and limbs, which best defined the structures, and the gently east plunging trend of the anticline. Limbs were carried down at plunge and terminated at 50 m past the last gold intercept. No Zone wireframe overlapping exists within a given

Domain except for the low grade background wireframes surrounding the high grade mineralization Zones. Mineralized wireframes truncate at the contact of the regional fault constraining each Domain. A low-grade background wireframe was created for each Domain which completely encompassed all Zones. These low-grade Zones were truncated by the regional faults defining the limits of the Domains. Assays which could not be assigned to mineralized Zones were included in the low-grade background estimation. A cut off grade of 0.2 g/t Au was used. All wireframes were clipped to topography.

It is Nordmin's opinion that the implicit modelling approach allowed for better wireframe interpretation due to the "saddle" shaped geometry of the Project lithologies. It also allowed for more consistent and varied thickness in the stacked lenses while avoiding any potentially unforeseen cross-overs within wireframes.

Figure 14-3 displays all Zones, colour-coded by Domain. Figure 14-4 displays all mineralized Zones coloured by Zone and Figure 14-5 shows a cross-section view through Domain 6 with all mineralized wireframes coloured by Zone.

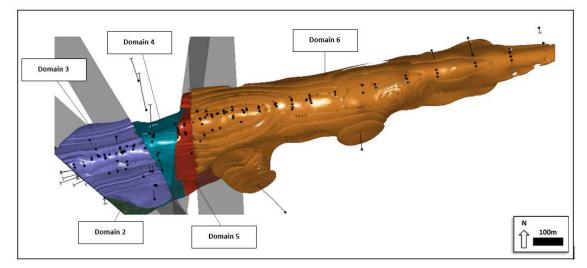


Figure 14-3: Plan view of mineralized Domains separated by regional faults Source: Nordmin 2022

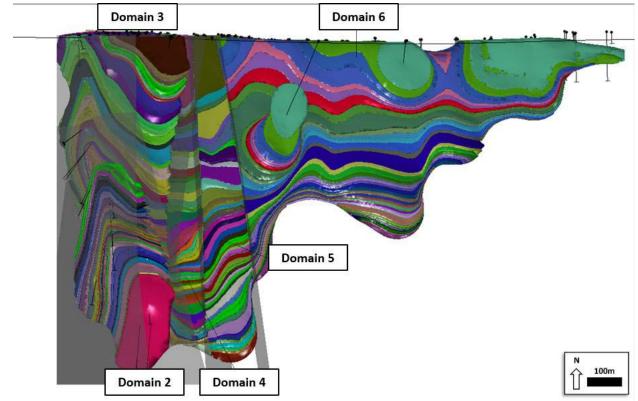


Figure 14-4: Side view looking North of the individual mineralized Zones separated by regional faults Source: Nordmin 2022

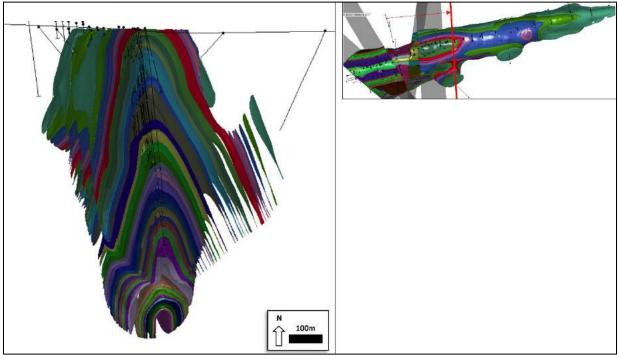


Figure 14-5: Representative vertical section across Domain 6 showing individual mineralized zones following the Crown Reserve Anticline trend.

# **14.4 EXPLORATORY DATA ANALYSIS**

The exploratory data analysis was conducted on raw drill hole data to determine the nature of gold distribution, correlation of grades within individual rock units, and the identification of high grade outlier samples. Nordmin used a geostatistical software package (X10 Geo<sup>™</sup>) to complete various descriptive statistics, histograms, probability plots, and XY scatter plots to analyze the grade population data. The findings of the exploratory data analysis were used to help define modelling procedures and parameters used in the MRE. Figure 14-6 through Figure 14-10 present histograms and other statistical plots used to examine Au distribution within each Domain.

Descriptive statistics were used to analyze the grade distribution of each sample population, determine the presence of outliers, and identify correlations between grade and rock types for each mineralized wireframe.

Table 14-2 though Table 14-6 provide a summary of the descriptive statistics for the raw sample populations captured from within each mineral zone.

Domain	Zone	Number of Drill holes	Number of Samples		
	2017	4	11		
	2018	4	11		
	2019	4	15		
	2020	5	10		
	2021	5	10		
	2023	4	13		
	2024	4	20		
	2027	4	28		
	2028	4	31		
2	2029	3	15		
Z	2031	2	9		
	2034	2	6		
	2036	5	21		
	2039	4	4		
	2040	4	8		
	2041	2	11		
	2042	2	12		
	2044	2	9		
	2045	2	8		
	Low Grade	14	1,290		

#### Table 14-2: Descriptive statistics summary, Domain 2

Domain	Zone	Number of Drill holes	Number of Samples
	3000	41	42
	3001	51	136
	3002	47	244
	3003	32	70
	3004	26	40
	3005	28	47
	3006	30	93
	3007	36	88
	3008	33	89
	3009	29	72
	3010	21	54
	3011	18	26
	3012	17	31
	3013	16	30
	3014	17	55
	3015	17	68
	3016	13	28
	3017	11	49
	3018	11	24
	3019	11	17
	3020	10	10
	3021	10	12
	3022	9	10
2	3023	8	23
3	3024	8	31
	3025	7	19
	3026	8	46
	3027	7	23
	3028	6	8
	3029	6	18
	3030	4	4
	3031	5	46
	3032	5	31
	3034	4	36
	3035	4	19
	3036	3	60
	3039	1	7
	3040	1	11
	3043	1	4
	3100	24	102
	3102	18	37
	3103	15	13
	3104	14	8
	3105	14	17
	3106	13	29
	3107	14	5
	3108	13	4
	Low Grade	87	5,264

### Table 14-3: Descriptive statistics summary, Domain 3

Domain	Zone	Number of Drill holes	Number of Samples
	4000	13	17
	4001	18	38
	4002	11	176
	4003	10	31
	4004	9	13
	4005	11	26
	4006	18	70
	4007	12	45
	4008	13	96
	4009	11	34
	4010	10	20
	4011	9	21
	4012	9	54
	4013	8	13
	4014	7	9
	4015	7	67
	4016	7	38
	4017	7	27
	4018	7	42
	4019	6	21
	4020	7	17
	4021	5	8
	4023	5	20
4	4024	5	32
	4027	5	40
	4028	4	11
	4030	5	18
	4031	4	5
	4032	3	23
	4033	3	4
	4034	3	6
	4035	4	30
	4036	3	3
	4037	3	3
	4038	4	64
	4039	3	6
	4040	2	12
	4041	2	2
	4042	2	2
	4043	2	11
	4044	2	18
	4045	2	3
	4100	9	12
	4101	6	7
	4102	6	5
	Low Grade	41	2,755

### Table 14-4: Descriptive statistics summary, Domain 4

Domain	Zone	Number of Drill holes	Number of Samples
	5000	9	12
	5001	14	22
	5002	9	33
	5003	9	22
	5004	9	18
	5005	7	22
	5006	4	11
	5007	5	13
	5008	5	10
	5009	7	9
	5010	7	7
	5011	6	9
5	5012	6	14
	5013	5	15
	5014	5	10
	5015	5	13
	5016	4	11
	5022	3	3
	5024	1	6
	5028	1	3
	5032	2	20
	5033	2	4
	5036	2	15
	5050	13	29
	Low-Grade	27	1,788

## Table 14-5: Descriptive statistics summary, Domain 5

Domain	Zone	Number of Drill holes	Number of Samples			
	6000	71	78			
	6001	74	170			
	6002	65	225			
	6003	50	109			
	6004	43	103			
	6005	36	50			
	6006	36	137			
	6007	31	103			
	6008	23	84			
	6009	18	25			
	6010	18	18			
	6011	16	21			
	6012	16	45			
	6013	11	19			
	6014	9	9			
	6015	10	38			
c	6016	8	17			
6	6017	7	17			
	6018	7	13			
	6019	4	13			
	6020	4	11			
	6021	3	12			
	6022	2	4			
	6026	2	6			
	6027	2	17			
	6100	74	54			
	6102	42	32			
	6103	41	42			
	6104	34	18			
	6105	33	14			
	6106	33	15			
	6108	13	7			
	6109	8	11			
	Low Grade	93	5,463			

Table 14-6: Descriptive statistics summary, Domain 6

Figure 14-6 through Figure 14-10 provide Au data analysis for Aureus East mineralization in all 5 Domains.

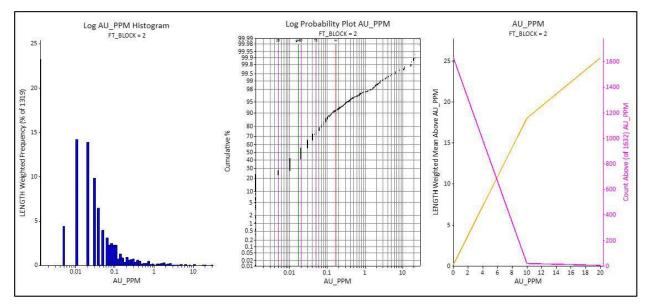


Figure 14-6: Au distribution for samples within Domain 2 at the Aureus East Deposit

Source: Nordmin 2022

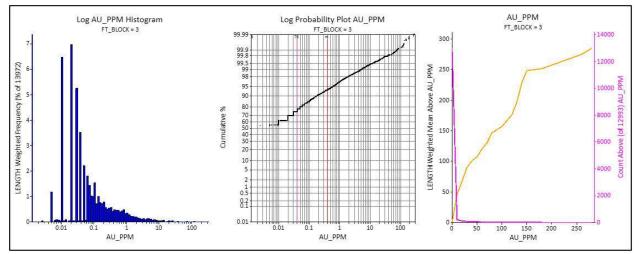


Figure 14-7: Au distribution for samples within Domain 3 at the Aureus East Deposit

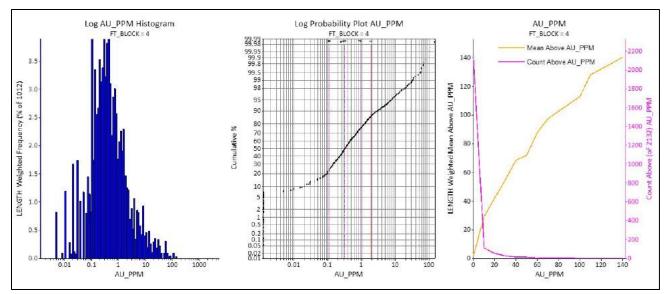


Figure 14-8: Au distribution for samples within Domain 4 at the Aureus East Deposit

Source: Nordmin 2022

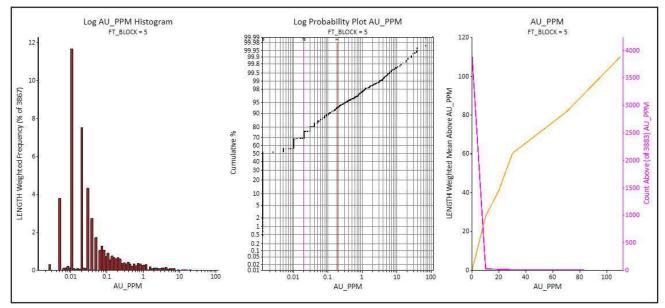


Figure 14-9: Au distribution for samples within Domain 5 at the Aureus East Deposit

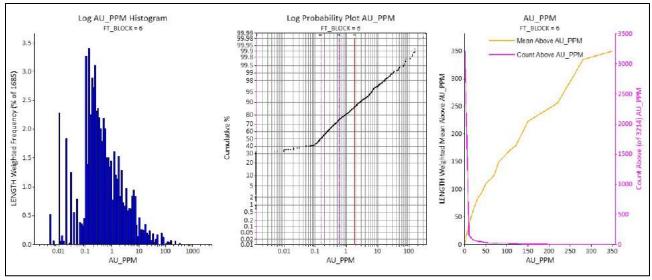


Figure 14-10: Au distribution for samples within Domain 6 at the Aureus East Deposit

# **14.5 DATA PREPARATION**

Prior to grade estimation, the data was prepared in the following manner for each of the Domains:

- Where possible and appropriate, unsampled intervals were assigned a half-minimum detection limit value (0.0025 g/t gold).
- The raw assay data was manually "flagged" first to intersecting Domains, and then to intersecting Zones (belt wireframes and low-grade zones) by assigning codes representative to the Domain and wireframe.
- Each belt and low-grade zone's flagged assays were statistically analyzed to define appropriate capping, modelling procedures, and parameters.
- High grade outlier samples in each zone were examined individually, and appropriate top-cutting to a variable maximum value was applied where appropriate (capping).

# 14.5.1 NON-SAMPLED INTERVALS AND MINIMUM DETECTION LIMITS

Table 14-7 summarizes the drill hole assays at minimum detection used in the resource model. The assay table received by Nordmin contained half-minimum detection gold values substituted for assays below minimum detection. When non-assayed gold intervals exist for payable and non-payable fields, half-minimum detection values were substituted to remove bias from the block model. Assays performed with gravimetric finish have a minimum detection limit of 0.00125 g/t Au, and assays performed with atomic absorption spectrometry have a minimum detection limit of 0.005 g/t Au.

Table 14-7: Assays at Minimum Detection

Field	Count	Minimum Detection Limit	Count at Minimum Detection	% at Minimum Detection
Au (g/t)	79,165	0.00125/0.005	15,334	19.4

## 14.6 OUTLIER ANALYSIS AND CAPPING

Grade outliers are high grade assay values that are much higher than the general population of samples and have the potential to bias (inflate) the quantity of metal estimated in a block model. Geostatistical analysis using XY scatter plots, cumulative probability plots, and decile analysis was used by Nordmin to analyze the raw drill hole assay data for each Domain to determine appropriate grade capping. Statistical analysis was performed by the X10 Geo software package. Figure 14-11 through Figure 14-15 display Au (g/t) sample distribution within specified Zones before and after applying a capping value. Table 14-8 through Table 14-12 are summaries of the results from the capping analysis per Domain.

The raw assay data was manually "flagged" by assigning an integer code reflecting each assay's intersecting Domain and Zone. Each Zone's flagged assays were statistically analyzed to define appropriate capping, modelling procedures, and parameters. Nordmin determined that the most appropriate capping procedure was to variably cap each belt and low-grade assay set to prevent excessive high grade from skewing the estimation in each wireframe.

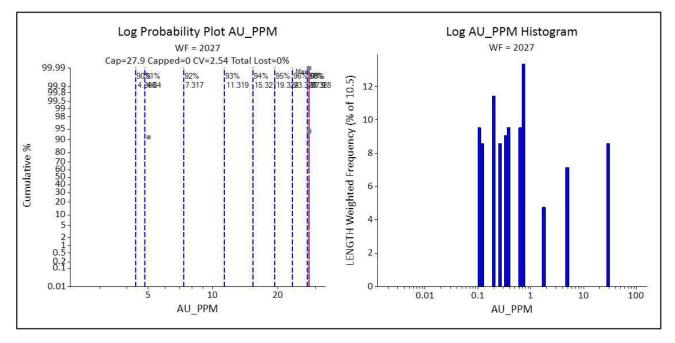


Figure 14-11: Uncapped Au (g/t) sample distribution of Zone 2027

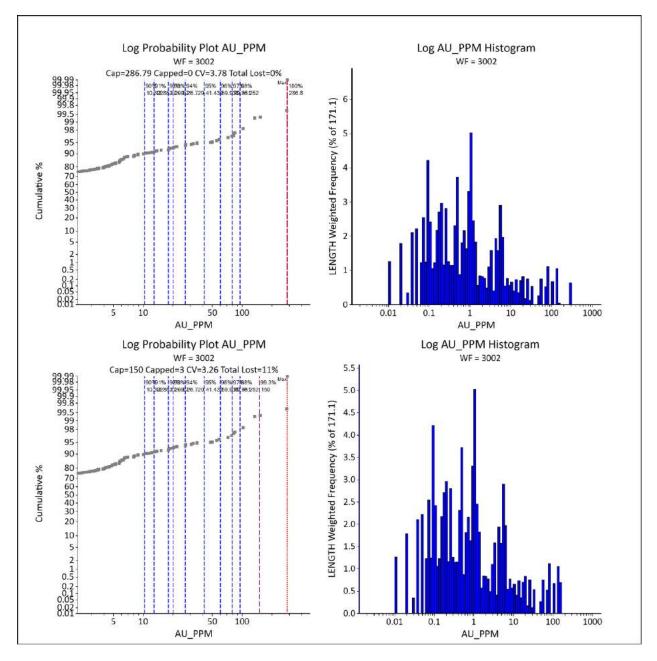
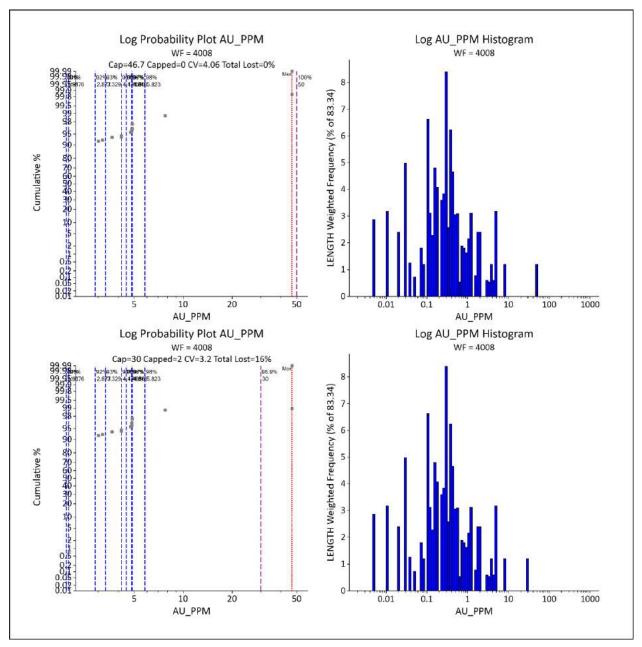
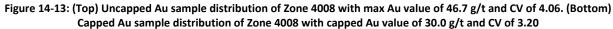


Figure 14-12: (Top) Uncapped Au sample distribution of Zone 3002 with max Au value of 286.8 g/t and CV of 3.78. (Bottom) Capped Au sample distribution of Zone 3002 with capped Au value of 150 g/t and CV of 3.26





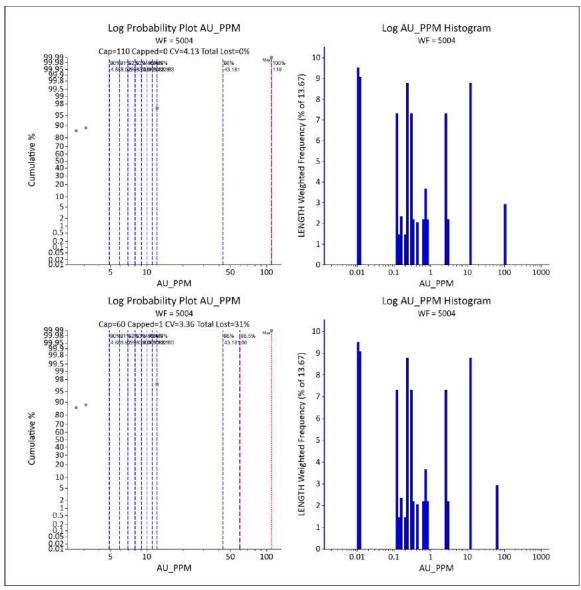


Figure 14-14: (Top) Uncapped Au sample distribution of Zone 5004 with max Au value of 110 g/t and CV of 4.13. (Bottom) Capped Au sample distribution of Zone 5004 with capped Au value of 60.0 g/t and CV of 3.36 Source: Nordmin 2022

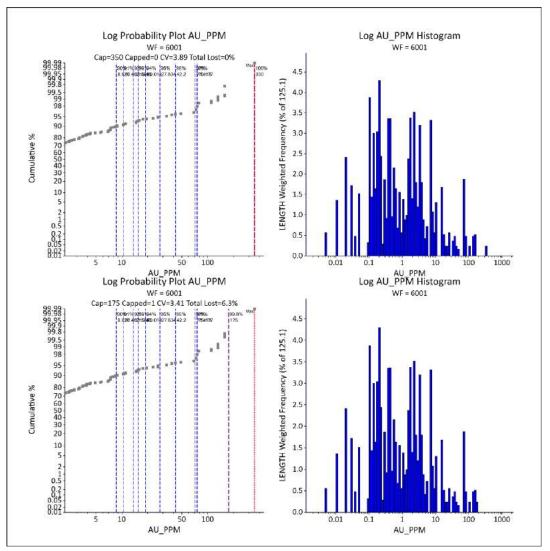


Figure 14-15: (Top) Uncapped Au sample distribution of Zone 6001 with max Au value of 350 g/t and CV of 3.89. (Bottom) Capped Au sample distribution of Zone 6001 with capped Au value of 175 g/t and CV of 3.41 Source: Nordmin 2022

### Table 14-8: Outlier Analysis and Capping, Domain 2

						Uncapped Capped									
			Сар	# of									#	%	% Metal
Domain	Zone	Metal	(g/t)	Samples	Min	Max	Mean	CV	Min	Max	Mean	CV	Capped	Capped	Loss
	16	Au	No Cap	6	0.370	3.410	1.673	1.07	0.370	3.410	1.673	1.07	0	0	0
	17	Au	No Cap	11	0.100	6.240	1.638	1.37	0.100	6.240	1.638	1.37	0	0	0
	18	Au	No Cap	11	0.030	0.420	0.287	0.48	0.030	0.420	0.287	0.48	0	0	0
	19	Au	No Cap	15	0.100	10.550	2.878	1.16	0.100	10.550	2.878	1.16	0	0	0
	20	Au	No Cap	10	0.020	19.350	2.591	2.45	0.020	19.350	2.591	2.45	0	0	0
	21	Au	No Cap	10	0.001	4.760	0.897	1.85	0.001	4.760	0.897	1.85	0	0	0
	23	Au	No Cap	13	0.040	2.930	1.135	0.97	0.040	2.930	1.135	0.97	0	0	0
	24	Au	No Cap	20	0.010	17.200	3.562	1.72	0.010	17.200	3.562	1.72	0	0	0
	27	Au	20.0	28	0.100	27.900	3.122	2.54	0.100	20.000	2.33	1.98	3	10.7	22.0
n 2	28	Au	No Cap	31	0.110	21.300	2.176	2.59	0.110	21.300	2.176	2.59	0	0	0
Domain	29	Au	No Cap	15	0.010	2.500	0.801	1.18	0.010	2.500	0.801	1.18	0	0	0
Do	31	Au	No Cap	9	0.240	0.760	0.473	0.55	0.240	0.760	0.473	0.55	0	0	0
	34	Au	No Cap	6	0.540	1.630	0.974	0.55	0.540	1.630	0.974	0.55	0	0	0
	36	Au	No Cap	21	0.070	11.160	1.560	2.20	0.070	11.160	1.560	2.20	0	0	0
	39	Au	No Cap	4	0.005	1.290	0.400	1.73	0.005	1.290	0.400	1.73	0	0	0
	40	Au	No Cap	8	0.010	4.210	0.956	1.59	0.010	4.210	0.956	1.59	0	0	0
	41	Au	No Cap	5	0.100	4.145	0.824	1.69	0.100	4.145	0.824	1.69	0	0	0
	42	Au	No Cap	11	0.070	1.950	0.566	1.21	0.070	1.950	0.566	1.21	0	0	0
	44	Au	No Cap	9	0.040	16.430	3.414	1.72	0.040	16.430	3.414	1.72	0	0	0
	45	Au	No Cap	8	0.020	2.480	0.304	2.44	0.020	2.480	0.304	2.44	0	0	0
	Low Grade	Au	2.0	1,288	0.001	3.680	0.036	3.44	0.001	3.680	0.036	2.64	2	0.2	3.4

### Table 14-9: Outlier Analysis and Capping, Domain 3

						l	Jncapped					(	Capped		
			Сар	# of									#	%	% Metal
Domain	Zone	Metal	(g/t)	Samples	Min	Мах	Mean	CV	Min	Max	Mean	CV	Capped	Capped	Loss
	00	Au	50.0	75	0.001	183.100	1.184	7.04	0.001	75.000	1.184	3.90	1	1.3	20.0
	01	Au	No Cap	219	0.001	100.400	3.725	4.23	0.001	100.400	3.725	4.08	0	0.0	0.0
	02	Au	150.0	324	0.001	286.800	7.887	3.78	0.001	150.000	7.026	3.26	3	0.9	11.0
	03	Au	No Cap	116	0.001	12.890	1.373	1.42	0.001	12.890	1.373	1.42	0	0.0	0.0
	04	Au	40.0	61	0.001	51.100	3.068	3.19	0.001	40.000	2.708	2.96	1	1.6	9.8
	05	Au	80.0	75	0.001	125.500	8.792	2.89	0.001	80.000	7.672	2.69	1	1.3	5.6
	06	Au	40.0	147	0.001	62.8	2.249	2.69	0.001	40.000	2.109	2.24	1	0.7	6.2
	07	Au	No Cap	160	0.001	10.500	1.244	1.51	0.001	10.500	1.244	1.51	0	0.0	0.0
	08	Au	No Cap	163	0.005	12.580	0.992	1.89	0.005	12.580	0.992	1.89	0	0.0	0.0
	09	Au	120.0	137	0.001	182.4	7.972	3.23	0.001	120.000	7.303	2.97	3	2.2	6.4
	10	Au	No Cap	102	0.001	29.200	1.789	2.41	0.001	29.200	1.789	2.41	0	0.0	0.0
	11	Au	No Cap	53	0.001	15.800	0.778	2.79	0.001	15.800	0.778	2.79	0	0.0	0.0
-	12	Au	No Cap	68	0.001	11.400	0.635	2.85	0.001	11.400	0.635	2.85	0	0.0	0.0
-	13	Au	No Cap	60	0.001	9.420	0.888	2.08	0.001	9.420	0.888	2.08	0	0.0	0.0
	14	Au	30.0	107	0.001	149.000	3.073	5.93	0.001	30.000	1.281	3.02	3	2.8	15.0
•	15	Au	50.0	136	0.001	127.500	2.387	5.02	0.001	50.000	1.739	3.15	3	2.2	27.0
	16	Au	No Cap	41	0.001	41.310	1.670	3.78	0.001	41.310	1.670	3.78	0	0.0	0.0
	17	Au	20.0	79	0.001	37.500	1.546	3.43	0.001	20.000	1.190	2.42	2	2.5	12.0
•	18	Au	No Cap	47	0.001	1.770	0.404	1.12	0.001	1.770	0.404	1.12	0	0.0	0.0
•	19	Au	No Cap	37	0.001	1.800	0.359	1.30	0.001	1.800	0.359	1.30	0	0.0	0.0
	20	Au	No Cap	19	0.001	2.430	0.340	1.91	0.001	2.430	0.340	1.91	0	0.0	0.0
	20	Au	No Cap	26	0.001	0.920	0.340	0.94	0.001	0.920	0.340	0.94	0	0.0	0.0
	22	Au	No Cap	20	0.001	15.000	1.463	2.30	0.001	15.000	1.463	2.30	0	0.0	0.0
in 3	22	Au	No Cap	45	0.001	55.800	3.158	3.31	0.001	55.800	3.158	3.31	0	0.0	0.0
Domain 3	23	Au	No Cap	53	0.020	22.600	1.715	2.59	0.020	22.600	1.715	2.59	0	0.0	0.0
Doi	24			31	0.030	9.090	1.337		0.030	9.090	1.337	1.98	0	0.0	0.0
_	25	Au	No Cap	46	0.010		2.168	1.98 2.65	0.010	48.200	2.168	2.65	0	0.0	0.0
	20	Au	No Cap	36		48.200						2.81	2	5.6	27.0
		Au	20.0		0.005	36.800	1.757	3.57	0.005	20.000	1.286				
-	28	Au	No Cap	13	0.001	1.170	0.311	1.31	0.001	1.17	0.311	1.31	0	0.0	0.0
-	29	Au	No Cap	35	0.010	26.100	3.802	1.99	0.010	26.100	3.802	1.99	0	0.0	0.0
	30	Au	No Cap	12	0.010	3.850	1.586	1.03	0.010	3.850	1.586	1.03	0	0.0	0.0
	31	Au	No Cap	71	0.010	28.400	2.726	1.93	0.010	28.400	2.726	1.93	0	0.0	0.0
	32	Au	100.0	67	0.030	264.000	11.040	4.55	0.030	100.000	5.024	3.82	3	4.5	55.0
	34	Au	No Cap	55	0.020	4.210	0.625	1.13	0.020	4.210	0.625	1.13	0	0.0	0.0
	35	Au	35.0	34	0.020	73.400	4.353	3.44	0.020	35.000	2.831	2.81	3	8.8	35.0
	36	Au	No Cap	74	0.005	10.700	0.644	2.40	0.005	10.700	0.644	2.40	0	0.0	0.0
-	39	Au	No Cap	13	0.110	7.680	1.383	2.04	0.110	7.680	1.383	2.04	0	0.0	0.0
ŀ	40	Au	No Cap	15	0.110	11.700	1.290	2.81	0.110	11.700	1.290	2.81	0	0.0	0.0
ŀ	43	Au	No Cap	7	0.200	1.920	0.864	0.83	0.200	1.920	0.864	0.83	0	0.0	0.0
	S00	Au	4.0	189	0.001	7.040	0.055	7.97	0.001	4.000	0.0457	6.58	2	1.1	17.0
	S02	Au	20.0	103	0.001	39.970	0.816	3.45	0.001	20.000	0.737	2.41	1	1.0	9.7
	S03	Au	No Cap	24	0.001	16.560	0.763	4.28	0.001	16.560	0.763	4.28	0	0.0	0.0
	S04	Au	No Cap	36	0.001	0.030	0.003	2.14	0.001	0.030	0.003	2.14	0	0.0	0.0
	S05	Au	No Cap	32	0.001	1.560	0.207	1.97	0.001	1.560	0.207	1.97	0	0.0	0.0
	S06	Au	No Cap	97	0.001	15.150	0.997	2.66	0.001	15.150	0.997	2.66	0	0.0	0.0
	S07	Au	No Cap	22	0.001	5.800	0.716	2.65	0.001	5.800	0.716	2.65	0	0.0	0.0
	S08	Au	No Cap	24	0.001	14.100	0.680	3.90	0.001	14.100	0.680	3.90	0	0.0	0.0
	Low Grade	Au	5.0	9,480	0.000	56.500	0.058	14.83	0.000	5.000	0.058	5.63	27	0.3	29.0

Source: Nordmin, 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

### Table 14-10: Outlier Analysis and Capping, Domain 4

Domain         Zone           00         01           02         03           04         05           06         07           08         09           10         11           12         13           14         15           16         17           18         19           20         21           23         24           27         28           300         31           32         33           34         35           36         37           38         39           40         41           42         43						Uncap	ped		Capped # %						
00           01           02           03           04           05           06           07           08           09           10           11           12           13           14           15           16           17           18           19           20           21           23           24           27           28           30           31           32           33           34           35           36           37           38           39           40           41           42			Сар	# of									#	%	% Metal
01         02         03         04         05         06         07         08         09         10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	Zone	Metal	(g/t)	Samples	Min	Max	Mean	cv	Min	Max	Mean	CV	Capped	Capped	Loss
02         03         04         05         06         07         08         09         10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41          42	00	Au	No Cap	23	0.001	33.200	1.296	3.32	0.001	33.200	1.296	3.32	0	0.0	0.0
03         04         05         06         07         08         09         10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	01	Au	No Cap	66	0.001	103.600	7.037	2.80	0.001	103.600	7.037	2.80	0	0.0	0.0
04         05         06         07         08         09         10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	02	Au	No Cap	269	0.001	110.000	2.874	2.93	0.001	110.000	2.874	2.93	0	0.0	0.0
05         06         07         08         09         10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	03	Au	No Cap	44	0.016	15.950	1.960	2.03	0.016	15.950	1.960	2.03	0	0.0	0.0
06         07         08         09         10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	04	Au	No Cap	25	0.001	31.100	2.065	3.58	0.001	31.100	2.065	3.58	0	0.0	0.0
07         08         09         10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	05	Au	No Cap	34	0.091	57.500	7.235	2.10	0.091	57.500	7.235	2.10	0	0.0	0.0
08         09         10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	06	Au	No Cap	106	0.001	34.100	1.541	2.21	0.001	34.100	1.541	2.21	0	0.0	0.0
09         10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	07	Au	No Cap	81	0.001	28.800	1.274	3.20	0.001	28.800	1.274	3.20	0	0.0	0.0
10         11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	08	Au	30.0	162	0.005	46.700	1.279	4.06	0.005	30.000	1.079	3.20	2	1.2	16.0
11         12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	09	Au	No Cap	67	0.020	6.850	0.906	1.61	0.020	6.850	0.906	1.61	0	0.0	0.0
12         13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	10	Au	No Cap	39	0.001	8.270	0.501	3.07	0.001	8.270	0.501	3.07	0	0.0	0.0
13         14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	11	Au	No Cap	48	0.001	9.840	0.621	2.82	0.001	9.840	0.621	2.82	0	0.0	0.0
14         15         16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	12	Au	No Cap	98	0.030	13.100	0.657	2.84	0.030	13.100	0.657	2.84	0	0.0	0.0
15 16 17 18 19 20 21 23 24 24 27 28 30 31 32 33 34 35 36 37 38 39 40 41 42	13	Au	No Cap	30	0.110	3.880	1.524	0.92	0.110	3.880	1.524	0.92	0	0.0	0.0
16         17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	14	Au	No Cap	24	0.120	1.920	0.707	0.87	0.120	1.920	0.707	0.87	0	0.0	0.0
17         18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	15	Au	No Cap	103	0.005	56.200	2.974	2.71	0.005	56.200	2.974	2.71	0	0.0	0.0
18         19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	16	Au	No Cap	80	0.020	12.300	0.780	2.41	0.020	12.300	0.780	2.41	0	0.0	0.0
19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	17	Au	No Cap	37	0.005	13.400	1.168	2.03	0.005	13.400	1.168	2.03	0	0.0	0.0
19         20         21         23         24         27         28         30         31         32         33         34         35         36         37         38         39         40         41         42	18	Au	90.0	76	0.030	140.300	6.550	3.11	0.030	90.000	6.060	2.89	2	2.6	7.5
20 21 23 24 24 27 28 30 31 32 33 34 35 36 37 38 39 40 41 42		Au	No Cap	46	0.060	13.600	1.216	2.51	0.060	13.600	1.216	2.51	0	0.0	0.0
*       21         23       24         24       27         28       30         31       32         33       34         35       36         37       38         39       40         41       42		Au	No Cap	26	0.110	1.740	0.534	0.85	0.110	1.740	0.534	0.85	0	0.0	0.0
E         23           24         27           28         30           31         32           33         34           35         36           37         38           39         40           41         42		Au	No Cap	19	0.030	0.920	0.420	0.76	0.030	0.920	0.420	0.76	0	0.0	0.0
$     \begin{array}{r}       21 \\       28 \\       30 \\       31 \\       32 \\       33 \\       34 \\       35 \\       36 \\       37 \\       38 \\       39 \\       40 \\       41 \\       42 \\       \end{array} $		Au	No Cap	44	0.005	31.800	2.647	2.39	0.005	31.800	2.647	2.39	0	0.0	0.0
$     \begin{array}{r}       21 \\       28 \\       30 \\       31 \\       32 \\       33 \\       34 \\       35 \\       36 \\       37 \\       38 \\       39 \\       40 \\       41 \\       42 \\       \end{array} $		Au	No Cap	67	0.070	5.680	0.632	1.62	0.070	5.680	0.632	1.62	0	0.0	0.0
28 30 31 32 33 34 35 36 37 38 39 40 41 42	27	Au	15.0	66	0.010	21.600	1.093	2.92	0.010	15.000	0.982	2.54	2	3.0	10.0
30 31 32 33 34 35 36 37 38 39 40 41 42	28	Au	No Cap	19	0.140	8.240	2.215	1.27	0.140	8.240	2.215	1.27	0	0.0	0.0
31 32 33 34 35 36 37 38 39 40 41 42		Au	No Cap	31	0.001	13.650	2.039	1.89	0.001	13.650	2.039	1.89	0	0.0	0.0
32 33 34 35 36 37 38 39 40 41 42		Au	No Cap	8	0.005	5.510	0.354	3.51	0.005	5.510	0.354	3.51	0	0.0	0.0
33 34 35 36 37 38 39 40 41 42	32	Au	No Cap	44	0.001	1.470	0.231	1.78	0.001	1.470	0.231	1.78	0	0.0	0.0
35 36 37 38 39 40 41 42	33	Au	No Cap	7	0.001	1.460	0.313	1.97	0.001	1.460	0.313	1.97	0	0.0	0.0
35 36 37 38 39 40 41 42	34	Au	No Cap	14	0.001	1.460	0.265	1.79	0.001	1.460	0.265	1.48	0	0.0	0.0
36 37 38 39 40 41 42		Au	30.0	51	0.010	58.300	2.082	3.57	0.010	30.000	1.674	2.64	3	5.9	20.0
37 38 39 40 41 42		Au	No Cap	7	0.001	0.680	0.234	1.00	0.001	0.680	0.234	1.00	0	0.0	0.0
38 39 40 41 42		Au	No Cap	8	0.001	2.250	1.345	0.84	0.001	2.250	1.345	0.84	0	0.0	0.0
39 40 41 42		Au	No Cap	105	0.050	7.710	0.667	1.57	0.050	7.710	0.667	1.57	0	0.0	0.0
40 41 42		Au	No Cap	12	0.160	6.260	2.251	1.17		6.260	2.251	1.17	0	0.0	0.0
41 42		Au	No Cap	18	0.090	1.520	0.408	1.07	0.090	1.520	0.408	1.07	0	0.0	0.0
42		Au	No Cap	6	0.050	1.780	1.381	0.65	0.050	1.780	1.381	0.65	0	0.0	0.0
		Au	No Cap	5	0.020	6.220	2.500	1.62	0.020	6.220	2.500	1.62	0	0.0	0.0
	43	Au	No Cap	15	0.030	34.100	3.108	2.95	0.030	34.100	3.108	2.95	0	0.0	0.0
44		Au	No Cap	28	0.001	12.950	0.907	2.83	0.001	12.950	0.907	2.83	0	0.0	0.0
45		Au	No Cap	7	0.140	21.800	6.555	1.52	0.140	21.800	6.555	1.52	0	0.0	0.0
\$00		Au	No Cap	21	0.001	10.650	2.812	1.53	0.001	10.650	2.812	1.53	0	0.0	0.0
S01		Au	No Cap	10	0.001	7.390	0.931	1.96	0.001	7.390	0.931	1.96	0	0.0	0.0
S02		Au	No Cap	8	0.001	3.880	0.793	1.49	0.001	3.880	0.793	1.49	0	0.0	0.0
Low Grade		Au	3.5	5,320	0.000	38.300	0.040	10.91	0.000	3.500	0.0344	4.48	15	0.3	15.0

Source: Nordmin, 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

Table 14-11: Outlier A	nalvsis and	Capping.	Domain 5
	anyono ama		<b>D</b> 01110

						Uncapped Capped									
			Сар	# of									#	%	% Metal
Domain	Zone	Metal	(g/t)	Samples	Min	Max	Mean	CV	Min	Max	Mean	CV	Capped	Capped	Loss
	00	Au	No Cap	17	0.001	2.180	0.917	1.03	0.001	2.180	0.917	1.03	0	0.0	0.0
	01	Au	No Cap	44	0.010	33.500	2.481	2.11	0.010	33.500	2.481	2.11	0	0.0	0.0
	02	Au	No Cap	48	0.001	21.400	1.310	2.51	0.001	21.400	1.310	2.51	0	0.0	0.0
	03	Au	12.0	28	0.010	18.900	1.539	2.30	0.010	12.000	1.539	2.30	1	3.6	9.0
	04	Au	60.0	20	0.001	110.000	4.689	4.13	0.001	60.000	3.226	3.36	1	5.0	31.0
	05	Au	No Cap	32	0.010	13.450	1.948	1.70	0.010	13.450	1.948	1.70	0	0.0	0.0
	06	Au	No Cap	16	0.020	4.790	1.670	1.04	0.020	4.790	1.670	1.04	0	0.0	0.0
	07	Au	No Cap	29	0.000	13.600	1.506	1.83	0.000	13.600	1.506	1.83	0	0.0	0.0
	08	Au	No Cap	29	0.001	7.520	0.963	2.34	0.001	7.520	0.963	2.34	0	0.0	0.0
	09	Au	No Cap	23	0.010	3.430	0.924	1.41	0.010	3.430	0.924	1.41	0	0.0	0.0
	10	Au	No Cap	18	0.010	4.450	1.306	1.34	0.010	4.450	1.306	1.34	0	0.0	0.0
in 5	11	Au	No Cap	21	0.010	1.950	0.444	1.41	0.010	1.950	0.444	1.41	0	0.0	0.0
Domain	12	Au	No Cap	33	0.010	1.210	0.264	1.00	0.010	1.210	0.264	1.00	0	0.0	0.0
Do	13	Au	No Cap	34	0.080	29.400	2.959	2.40	0.080	29.400	2.959	2.40	0	0.0	0.0
	14	Au	No Cap	21	0.130	4.260	0.821	1.61	0.130	4.260	0.821	1.61	0	0.0	0.0
	15	Au	No Cap	26	0.005	2.140	0.434	1.63	0.005	2.140	0.434	1.63	0	0.0	0.0
	16	Au	No Cap	26	0.110	26.700	4.586	1.81	0.110	26.700	4.586	1.81	0	0.0	0.0
	22	Au	No Cap	8	0.001	6.140	1.129	2.54	0.001	6.140	1.129	2.54	0	0.0	0.0
	24	Au	No Cap	21	0.240	5.200	1.323	1.26	0.240	5.200	1.323	1.26	0	0.0	0.0
	28	Au	No Cap	3	0.110	21.300	7.848	1.59	0.110	21.300	7.848	1.59	0	0.0	0.0
	32	Au	No Cap	32	0.040	0.980	0.375	0.76	0.040	0.980	0.375	0.76	0	0.0	0.0
	33	Au	No Cap	9	0.200	5.400	1.599	1.54	0.200	5.400	1.599	1.54	0	0.0	0.0
	36	Au	No Cap	23	0.140	1.640	0.451	0.93	0.140	1.640	0.451	0.93	0	0.0	0.0
	50	Au	30.0	48	0.020	37.200	2.609	2.44	0.020	30.000	2.471	2.28	2	4.2	5.3
	Low Grade	Au	3.0	3,090	0.000	70.300	0.050	24.18	0.000	3.000	0.0282	5.20	9	0.3	43.0

### Table 14-12: Outlier Analysis and Capping, Domain 6

						ι	Incapped			Capped					
			Сар	# of									#	%	% Metal
Domain	Zone	Metal	(g/t)	Samples	Min	Max	Mean	cv	Min	Max	Mean	CV	Capped	Capped	Loss
	00	Au	No Cap	171	0.000	146.000	3.737	4.59	0.000	146.000	3.737	4.59	0	0.0	0.0
	01	Au	175.0	299	0.001	350.000	6.615	3.89	0.001	175.000	6.195	3.41	1	0.3	6.3
	02	Au	120.0	329	0.000	288.700	2.883	4.18	0.000	120.000	2.785	3.69	1	0.3	3.4
	03	Au	No Cap	213	0.001	50.600	1.792	2.86	0.001	50.600	1.792	2.86	0	0.0	0.0
	04	Au	No Cap	152	0.001	68.600	4.066	2.29	0.001	68.600	4.066	2.29	0	0.0	0.0
	05	Au	No Cap	126	0.001	6.550	0.608	1.87	0.001	6.550	0.608	1.87	0	0.0	0.0
	06	Au	No Cap	244	0.000	33.700	1.889	2.08	0.000	33.700	1.889	2.08	0	0.0	0.0
	07	Au	120.0	173	0.001	221.000	4.520	5.45	0.001	120.000	3.323	4.30	1	0.6	26.0
	08	Au	No Cap	180	0.001	17.400	1.301	2.25	0.001	17.400	1.301	2.25	0	0.0	0.0
	09	Au	No Cap	51	0.001	5.690	0.434	2.61	0.001	5.690	0.434	2.61	0	0.0	0.0
	10	Au	No Cap	45	0.001	45.390	1.949	3.19	0.001	45.390	1.949	3.19	0	0.0	0.0
	11	Au	No Cap	44	0.001	11.000	1.133	2.10	0.001	11.000	1.133	2.10	0	0.0	0.0
	12	Au	No Cap	82	0.001	6.930	0.836	1.60	0.001	6.930	0.836	1.60	0	0.0	0.0
	13	Au	No Cap	36	0.001	1.570	0.243	1.37	0.001	1.570	0.243	1.37	0	0.0	0.0
	14	Au	No Cap	25	0.001	5.980	0.859	1.93	0.001	5.980	0.859	1.93	0	0.0	0.0
9	15	Au	No Cap	74	0.001	5.350	0.476	2.06	0.001	5.350	0.476	2.06	0	0.0	0.0
Domain	16	Au	No Cap	35	0.020	2.360	0.656	1.07	0.020	2.360	0.656	1.07	0	0.0	0.0
ш	17	Au	No Cap	28	0.001	4.290	0.664	1.72	0.001	4.290	0.664	1.72	0	0.0	0.0
Δ	18	Au	No Cap	24	0.001	17.300	1.675	2.74	0.001	17.300	1.675	2.74	0	0.0	0.0
	19	Au	No Cap	28	0.010	1.730	0.428	1.36	0.010	1.730	0.428	1.36	0	0.0	0.0
	20	Au	No Cap	27	0.030	0.770	0.303	0.88	0.030	0.770	0.303	0.88	0	0.0	0.0
	21	Au	No Cap	23	0.001	1.690	0.219	2.03	0.001	1.690	0.219	2.03	0	0.0	0.0
	22	Au	No Cap	12	0.181	2.010	1.061	0.70	0.181	2.010	1.061	0.70	0	0.0	0.0
	26	Au	No Cap	18	0.236	7.560	2.553	1.06	0.236	7.560	2.553	1.06	0	0.0	0.0
	27	Au	No Cap	32	0.010	7.500	0.607	2.87	0.010	7.500	0.607	2.87	0	0.0	0.0
	S00	Au	No Cap	144	0.000	6.670	0.272	2.91	0.000	6.670	0.272	2.91	0	0.0	0.0
	S02	Au	No Cap	87	0.000	33.860	1.729	2.67	0.000	33.860	1.729	2.67	0	0.0	0.0
	S03	Au	10.0	87	0.000	20.900	0.206	8.48	0.000	10.000	0.135	6.97	3	3.4	34.0
	S04	Au	No Cap	56	0.001	12.550	0.878	3.12	0.001	12.550	0.878	3.12	0	0.0	0.0
	S05	Au	No Cap	46	0.000	7.020	0.388	3.67	0.000	7.020	0.388	3.67	0	0.0	0.0
	S06	Au	No Cap	50	0.001	3.170	0.126	3.01	0.001	3.170	0.126	3.01	0	0.0	0.0
	S08	Au	No Cap	20	0.000	23.900	1.595	3.80	0.000	23.900	1.595	3.80	0	0.0	0.0
	S09	Au	No Cap	18	0.000	2.310	0.851	1.02	0.000	2.310	0.851	1.02	0	0.0	0.0
	Low Grade	Au	4.0	144	0.000	6.670	0.272	0.000	0.000	4.000	0.256	2.65	4	2.8	5.6

Source: Nordmin, 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

## 14.6.1 COMPOSITING

Compositing of samples is a technique used to give each sample a relatively equal length to reduce the potential for bias due to uneven sample lengths; it prevents the potential loss of sample data and reduces the potential for grade bias due to the possible creation of short and potentially high grade composites that are generally formed along the zone contacts when using a fixed length.

The raw sample data was found to have a moderately consistent range of sample lengths. Samples captured within all Zones were composited to 1.0 m regular intervals based on the observed modal distribution of sample lengths, which supports a 2.0 m x 2.0 m x 2.0 m block model (Northing x Easting x Elevation) with three sub-blocking levels (a minimum size of Northing = 0.25 m x Easting = 0.25 m x Variable Elevation). An option to use a slightly variable composite length was chosen to allow for the back-stitching of shorter composites that are located along the edges of the composited interval. All composite samples were generated within each Zone, and there are no overlaps along boundaries. The composite samples were statistically validated to ensure no material loss of data or change to each sample population's mean grade. Table 14-3 summarizes composite counts by Domain and Zone.

Dom	nain 2	Don	nain 3	De	omain 4	I	Domain 5	Domain 6		
Zone	# of Composites	Zone	# of Composites	Zone	# of Composites	Zone	# of Composites	Zone	# of Composites	
16	2	00	45	00	14	00	9	00	83	
17	5	01	137	01	37	01	15	01	140	
18	6	02	174	02	98	02	25	02	177	
19	5	03	44	03	18	03	16	03	80	
20	7	04	29	04	13	04	14	04	89	
21	5	05	43	05	20	05	16	05	45	
23	6	06	83	06	57	06	10	06	113	
24	7	07	67	07	42	07	14	07	78	
27	11	08	75	08	86	08	10	08	75	
28	8	09	64	09	27	09	9	09	27	
29	6	10	50	10	23	10	8	10	21	
31	4	11	29	11	22	11	8	11	22	
34	3	12	34	12	44	12	13	12	41	
36	10	13	30	13	13	13	13	13	22	
39	4	14	50	14	8	14	8	14	12	
40	5	15	61	15	60	15	11	15	33	
41	3	16	29	16	33	16	9	16	16	
42	6	17	46	17	26	22	8	17	13	
44	5	18	26	18	31	24	5	18	12	
45	7	19	18	19	18	28	3	19	11	
Low Grade	1,160	20	15	20	15	32	20	20	11	
	_,	21	18	21	10	33	3	21	14	
	-	22	18	23	14	36	12	22	3	
	-	23	19	24	28	50	18	26	5	
		-				Low				
		24	28	27	30	Grade	3,509	27	14	
		25	18	28	10			00	83	
		26	37	30	18			02	48	
		27	21	31	4			03	118	
		28	10	32	33			04	35	
		29	16	33	7			05	43	
		30	4	34	7			06	39	
		31	39	35	19			08	16	
		32	28	36	4			09	10	
	ſ	34	31	37	3			S00	83	
	Ē	35	16	38	60			S01	140	
	Ē	36	57	39	7			S02	177	
	Ē	39	5	40	11			S03	80	
	Ē							Low		
		40	10	41	2			Grade	16,034	
	ſ	43	5	42	3					
	ſ	S00	189	43	10					
	ſ	S02	32	44	21					
	ſ	S03	20	45	2					
	ſ	S04	80	S00	9					
	ſ	S05	16	S01	6					
	ſ	S06	25	S02	6					
	ſ			Low						
		S07	13	Grade	5,341					
		S08	13							
Source: Nordmin		Low Grade	12,107							

Table 14-13: Composite counts by Zone for each Domain

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

# 14.7 SPECIFIC GRAVITY

A total of 250 SG measurements existed for all five Domains within the Project, provided from measurements made by Company personnel. This included 4 SG measurements from Domain 2, 31 measurements from Domain 3, 72 measurements from Domain 4, 28 measurements from Domain 5, and 32 measurements from the Domain 6. Measurements were taken from DDH samples using the weight of the core in air versus the weight in water method (Archimedes method) by applying the following formula:

 $Specific \ Gravity = \frac{Weight \ in \ Air}{(Weight \ in \ Air - Weight \ in \ Water)}$ 

Nordmin determined that the required amount and distribution of SG measurements did not exist for direct estimation of the entire block model. Nordmin examined the statistical behaviour of the SG measurements and concluded that the assignment of two SG values, one to the high grade mineralization Zones and another to the low grade Zones, was appropriate. This can be seen in Table 14-14.

### Table 14-14: Specific Gravity Assignment

Domain/Zone	SG Assigned				
All Belt Wireframes	2.770				
Low Grade Wireframes	2.723				

Source: Nordmin, 2022

# 14.8 BLOCK MODEL MINERAL RESOURCE ESTIMATION

# 14.8.1 BLOCK MODEL STRATEGY AND ANALYSIS

A series of upfront test modelling was completed to define an estimation methodology to meet the following criteria:

- Representative of the Project geology, structural models, and geological controls on mineralization.
- Accounts for the variability of grade, orientation, and continuity of mineralization.
- Controls the smoothing (grade spreading) of grades and the influence of outliers.
- Accounts for most of the mineralization.
- Is robust and repeatable within domains.
- Supports multiple high grade and low-grade zones.

Multiple test scenarios were evaluated to determine the optimum processes and parameters to use to achieve the stated criteria. Each scenario was based on NN, ID2, ID3, and OK interpolation methods.

All test scenarios were evaluated based on global statistical comparisons, visual comparisons of composite samples versus block grades, and the assessment of overall smoothing. Based on the results of the testing, it was determined that all scenarios, including the draft and final resource estimation methodology, would constrain the mineralization by using hard wireframe boundaries to control the spread of high grade and

low-grade mineralization. ID2 was selected as the most representative interpolation method for the Project.

# 14.8.2 BLOCK MODEL DEFINITION

Block model shape and size is typically a function of the geometry of the Project, the density of sample data, drill hole spacing, and the selected mining unit. Block models were defined with parent blocks at 2.0 m x 2.0 m (Northing x Easting x Elevation). Block model parameters are defined in Table 14-15.

All wireframe volumes were filled with blocks from the prototype (which used the parameters in Table 14-15). Block volumes were compared to the wireframe volumes to confirm there were no significant differences. Block volumes for all wireframes were found to be within reasonable tolerance limits. Subblocking was allowed to maintain the geological interpretation and to accommodate the Zones, the SG, and the category application. Sub-blocking has been allowed to the following minimums: 2.0 m x 2.0 m x 2.0 m s 0.25 m x 0.25 m in the N-S and E-W directions with a variable elevation calculated based on the other block dimensions.

_	NAD83 UTN Coordi					
ltem	Block Origin	Block Maximum	Block Extent (m)	Block Dimension (m)	Number of Blocks	Minimum Sub-Block (m)
Easting	547,000	549,800	549,800	2	1,400	0.25
Northing	4,979,000	4,981,000	4,981,000	2	1,000	0.25
Elevation	-1,200	300	300	2	750	Variable

### Table 14-15: Block Model Definition

Source: Nordmin, 2022

Block models were not rotated but were clipped to topography, and an overburden layer was coded. The MRE was conducted using Datamine Studio RM<sup>™</sup> version 1.11.300.0 within the NAD83 UTM Zone 20N datum.

Each Domain was independently estimated, resulting in five separate block models. These had extraneous fields removed and were combined into one overall resource block model.

# 14.8.3 INTERPOLATION METHOD

The Project block models were estimated using NN, ID2, ID3, and OK interpolation methods for global comparisons and validation purposes. The ID2 method was selected for the MRE; it was selected over NN, ID3, and OK as the method best controlling estimation and smoothing of grades and was the most representative of all domains in the Project.

# 14.8.4 SEARCH STRATEGY

Zonal controls were used to constrain the grade estimates to each wireframe. These controls prevented the samples from individual wireframes from influencing the block grades of others, acting as a "hard boundary" between the wireframes.

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc. The search orientation strategy determined to be most representative of the mineralization for the Project was to use a combination of an overall search ellipsoid for each Domain and to allow dynamic anisotropy in the estimation process. Dynamic anisotropy is a search adjustment applied to estimation which considers local variation of the wireframe orientation. It is Nordmin's opinion that dynamic anisotropy allows for a much more accurate estimation of grade and mineralization due to the tightly folded nature of mineralized and low-grade background Zones.

Estimation passes were defined with carefully selected search distances. The first pass is correlated to a Measured categorization, the second pass is correlated to an Indicated categorization, and the third pass is correlated to an Inferred categorization. These three passes of increasing distance were as follows (major axis x semi-major axis x minor axis). Overall search parameters can be found in Table 14-16.

- High grade Wireframes (Zones):
  - First Pass: 25 m x 15 m x 10 m
  - Second Pass: 37.5 m x 22.5 m x 15 m
  - Third Pass: 150 m x 90 m x 60 m
- Low-Grade Wireframes:
  - First Pass: 15 m x 10 m x 5 m
  - Second Pass: 22.5 m x 15 m x 7.5 m
  - Third Pass: 150 m x 100 m x 50 m

#### Table 14-16: Search Parameters

		llipso tion <i>A</i>	id Angles	_	es, Se Pass 1 (m)		Rang Pa	es, Se ss 2 (I		-	es, Se ss 3 (		-	osites, ss 1	•	osites, ss 2	•	osites, ss 3	
Domain	Туре	1 (X)	2 (Z)	3 (Y)	1	2	3	1	2	3	1	2	3	Min	Max	Min	Max	Min	Max
All	High Grade Zones	10	-84	23	25	15	10	37.5	22.5	15	150	90	60	3	8	3	8	2	8
All	Low Grade Background Zones	10	-84	23	15	10	5	22.5	15	7.5	150	100	50	3	8	3	8	2	8

## 14.8.5 ASSESSMENT OF SPATIAL GRADE CONTINUITY

Datamine, X10 Geo, and Sage 2001 was used to determine the geostatistical relationships of the Project. Independent variography was performed on composite data for wireframes contained to each fault block. Experimental grade variograms were calculated from the capped/composited sample gold data to determine the approximate search ellipse dimensions and orientations. Variography parameters can be found in Table 14-17.

The analyses considered the following:

- Downhole variograms were created and modelled to define the nugget effect.
- Experimental pairwise-relative correlogram variograms were calculated to determine directional variograms for the strike and down dip orientations.
- Variograms were modelled using an exponential with practical range.
- Directional variograms were modelled using the nugget defined in the downhole variography, and the ranges for strike, perpendicular to strike, and down dip directions.
- Variograms outputs were re-oriented to reflect the orientation of the mineralization.
- Individual variograms were created for each Domain.

	F	Rotation	Angl	es		Structure 1			Nugget		
Domain	1 2 3 Axes		Range 1	Range 2	Range 3	Range 1	Range 2	Range 3	Nugget		
All	018	-037	007	Z-Y-Z	1.6	13.9	5.0	3.8	141.0	22.4	0.002

#### Table 14-17: Variography Parameters

# **14.9 BLOCK MODEL VALIDATION**

The block model validation process included visual comparisons between block estimates and composite grades in plan and section, local versus global estimates for nearest neighbour ("NN"), inverse distance squared ("ID2"), inverse distance cubed("ID3"), and ordinary kriging ("OK"), as well as swath plots. Block estimates were visually compared to the drill hole composite data in all domains and corresponding zones to ensure agreement. No material grade bias issues were identified, and the block model grades compared well to the composite data.

# 14.9.1 VISUAL BLOCK MODEL VALIDATION

The validation of the interpolated block model was assessed by using visual assessments and validation plots of block grades versus capped assay composites. The review demonstrated a good comparison between local block estimates and nearby assays and composites without excessive smoothing in the block model. Figure 14-16 through Figure 14-21 provide the visual comparisons, displaying gold composite grades versus block model grades.

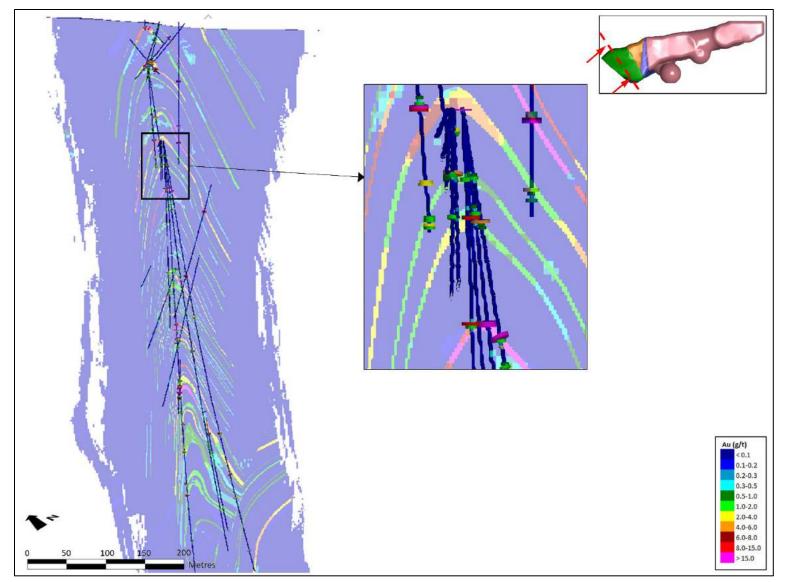


Figure 14-16: Cross section, block model validation displaying block model and capped composites in Domain 2

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

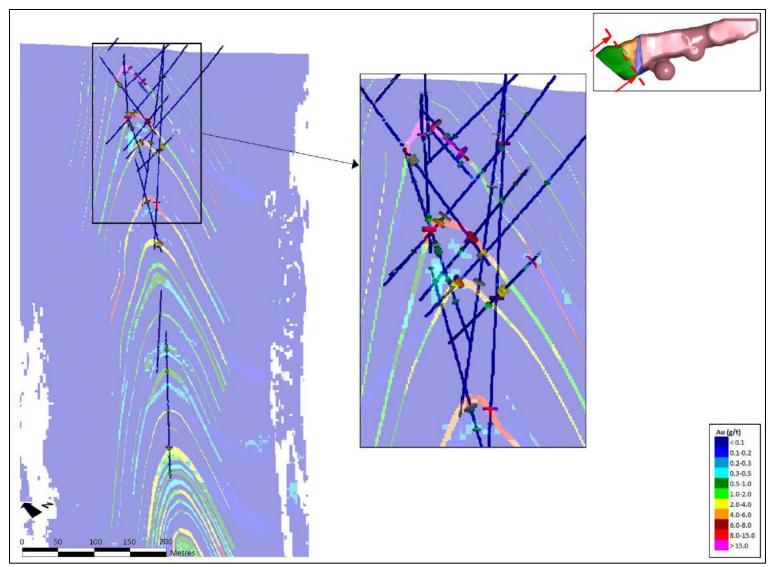


Figure 14-17: Cross section, block model validation displaying block model and capped composites in Domain 3

Source: Nordmin, 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

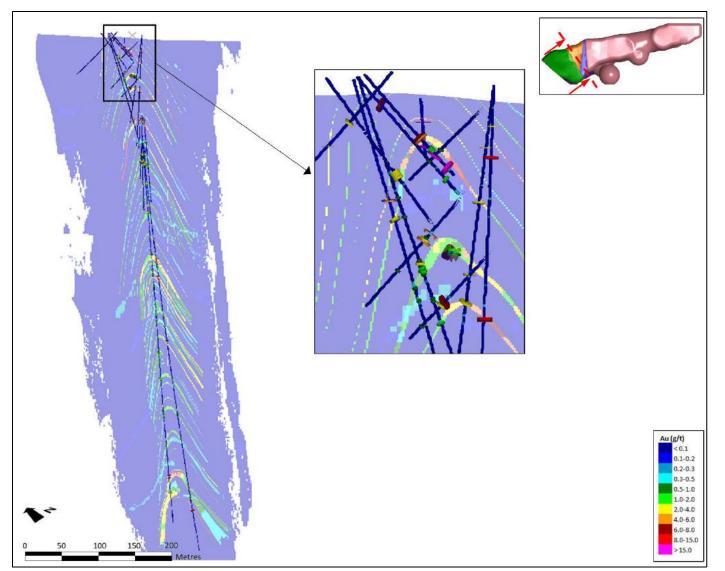


Figure 14-18: Cross section, block model validation displaying block model and capped composites in Domain 4 Source: Nordmin, 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

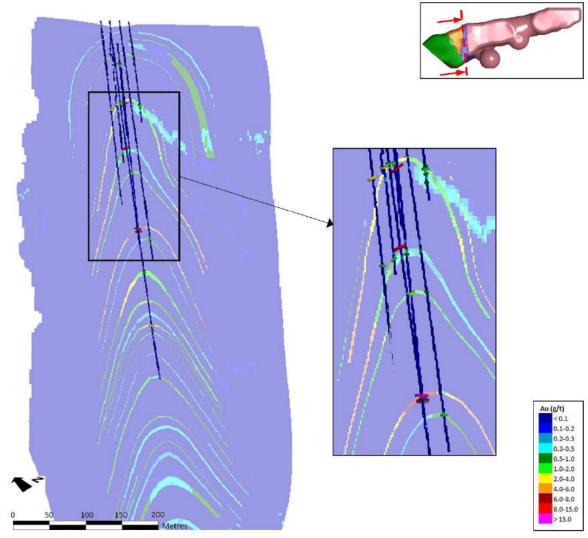


Figure 14-19: Cross section, block model validation displaying block model and capped composites in Domain 5 Source: Nordmin, 2022

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

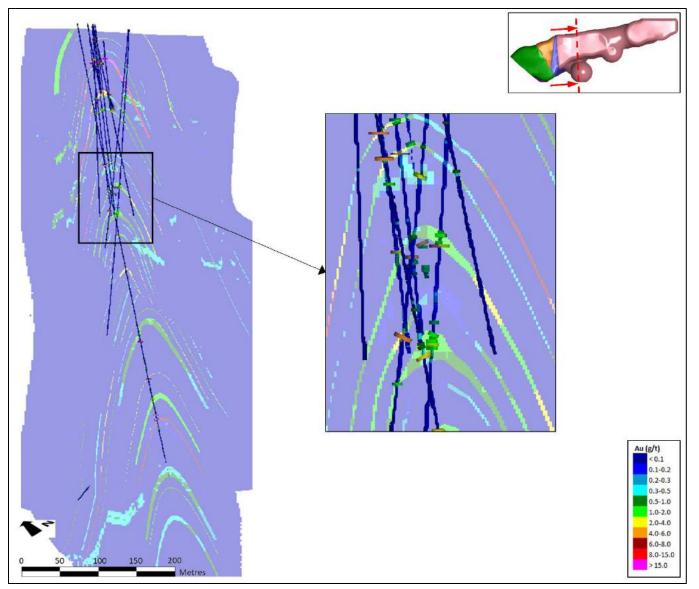
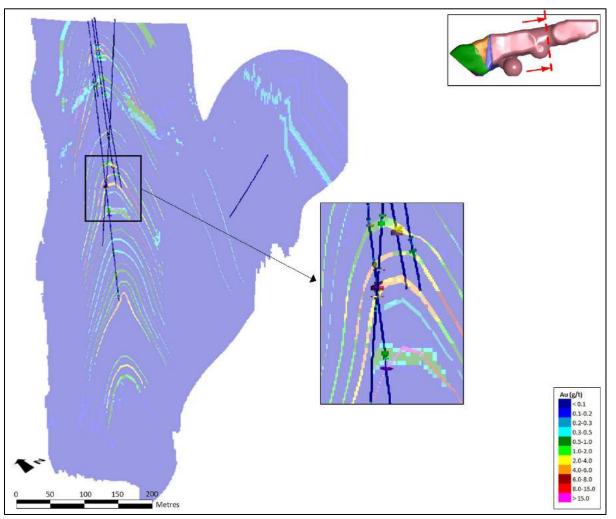
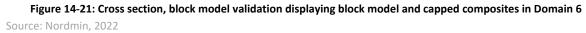


Figure 14-20: Cross section, block model validation displaying block model and capped composites in Domain 6

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc. Nordmin Engineering Ltd Project # 21186-01 Page 145





NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

## 14.9.2 SWATH PLOTS

A swath plot is a graphical representation of grade distribution derived by a series of sectional "swaths" throughout the Project. Swath plots were generated for gold from slices throughout the Deposit. They compare the block model grades for NN, ID2, ID3, and OK to the drill hole composite grades to evaluate any potential local grade bias. Review of the swath plots did not identify bias in the model that is material to the 2021 MRE, as there was a strong overall correlation between the block model ID2 grade and the capped composites used in the 2021 MRE. The swath plots for easting, northing, and elevation respectively are found in Figure 14-22, Figure 14-23, and Figure 14-24. For these figures, the composite grade (S\_AUCAP) is compared across swaths with the four gold estimation grades from the block model.

Fields include:

- M\_TONNES: Block model tonnage
- NRECORDS: Number of records
- S\_AUCAP: Composite capped gold grade (g/t)
- M\_AUID2: Block model estimated gold grade, ID2 (g/t)
- M\_AUID3: Block model estimated gold grade, ID3 (g/t)
- M\_AUNN: Block model estimated gold grade, NN (g/t)
- M\_AUOK: Block model estimated gold grade, OK (g/t)

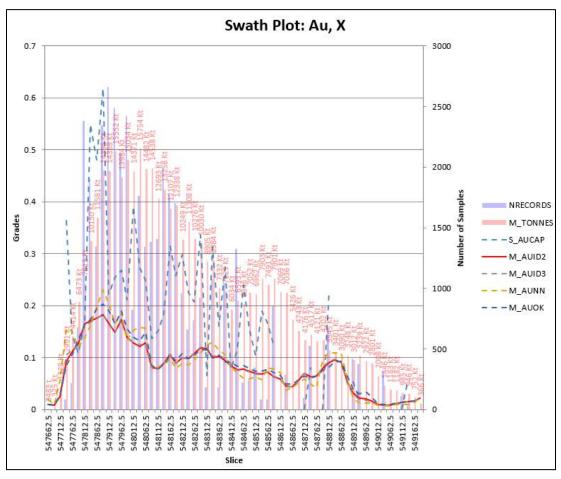
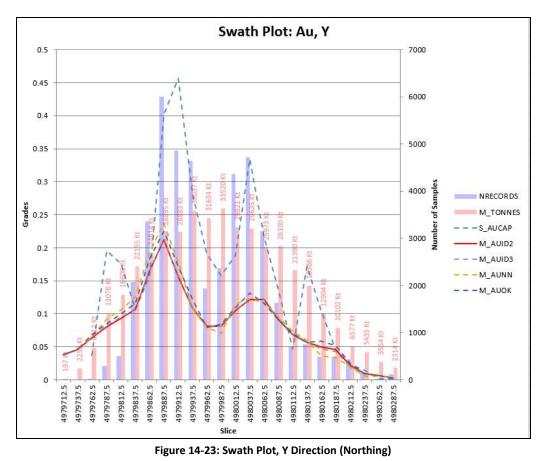


Figure 14-22: Swath Plot, X Direction (Easting)



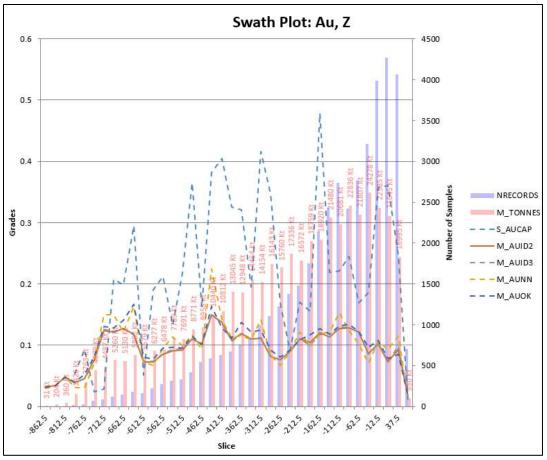


Figure 14-24: Swath Plot, Z Direction (Elevation)

## **14.10** INTERPOLATION COMPARISON

Estimation was completed using NN, ID2, ID3, and OK interpolation methods. The results are presented in Table 14-17. This includes all material that has been classified as Measured, Indicated, and Inferred.

## 14.11 MINERAL RESOURCE CLASSIFICATION

The MRE was classified in accordance with the 2014 CIM Definition Standards and 2019 CIM Best Practice Guidelines. Mineral Resource classifications were assigned to regions of the block model based on the QPs confidence and judgment related to geological understanding, continuity of mineralization in conjunction with data quality, spatial continuity based on variography, estimation pass, data density, and block model representativeness, specifically assay spacing and abundance, search volume block estimation assignment, and minimum distance to the nearest composite.

The classification was initially applied from the estimation pass. Blocks populated in pass 1 or pass 2 were classified as Indicated, and blocks populated in pass 3 were classified as Inferred. Subsequently, block models were analyzed, and it was determined that several classification adjustments were required.

- 1. Blocks that met a set of criteria were de-classified to address the potential for local excessive grade estimation range within a few individual wireframes. These criteria follow, and refer to the MINDIS field which is defined as *the minimum transform distance to the nearest composite (m)*:
  - For all blocks in all wireframes, any blocks that have a MINDIS value greater than or equal to 5.0 were declassified from the MRE.
  - For blocks in wireframes 4018 (Domain 4, wireframe 18), 4035 (Domain 4, wireframe 35), and 6001 (Domain 6, wireframe 1), any blocks that have a MINDIS value greater than 4.0 were declassified from the MRE.
- 2. Furthermore, elevation cut-offs were determined for each Domain, where any blocks with a centroid below the cut-off elevations were declassified from the MRE. These cut-offs follow:
  - Domain 2: All blocks below -450 m were declassified.
  - Domain 3: All blocks below -450 m were declassified.
  - Domain 4: All blocks below -425 m were declassified.
  - Domain 5: All blocks below -330 m were declassified.
  - Domain 6: All blocks below -250 m were declassified.

Classification can be seen in Figure 14-25 through Figure 14-29.

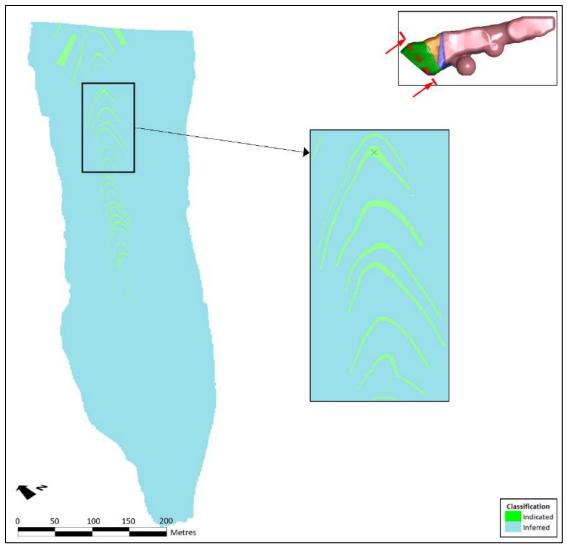


Figure 14-25: Cross section, resource classification, Domain 2

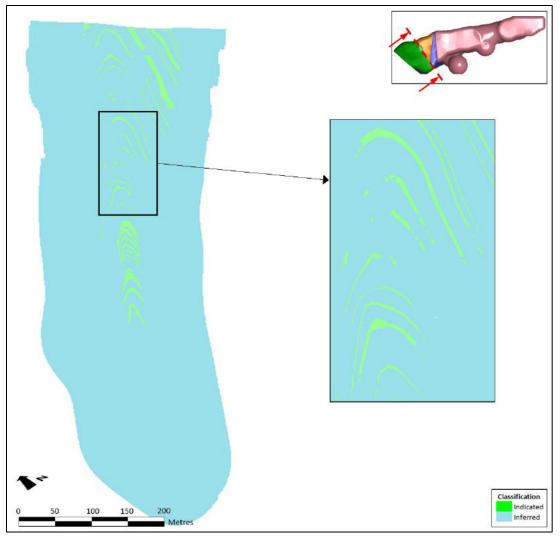


Figure 14-26: Cross section, resource classification, Domain 3

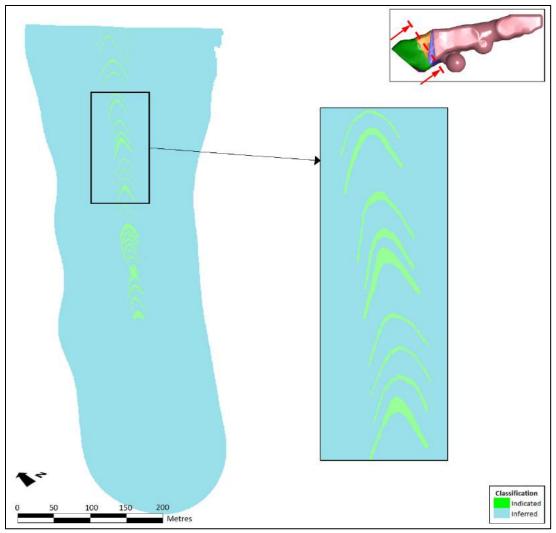


Figure 14-27: Cross section, resource classification, Domain 4 and 5

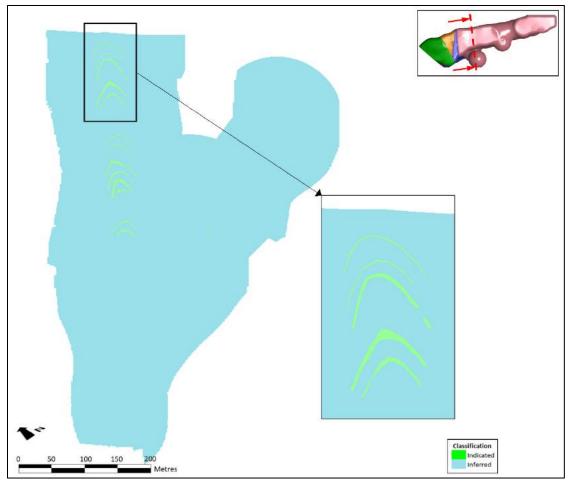


Figure 14-28: Cross section, resource classification, Domain 6 (western end)

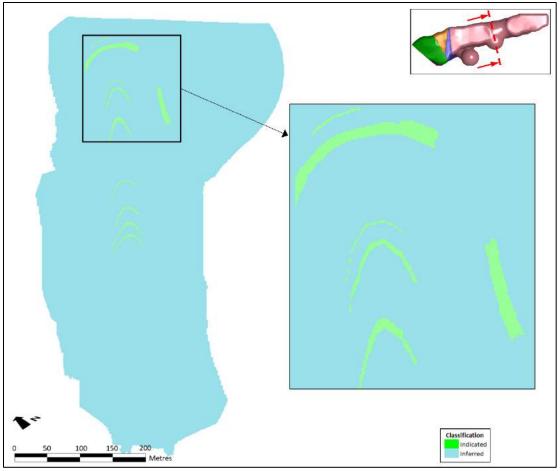


Figure 14-29: Cross section, resource classification, Domain 6 (eastern end)

## 14.12 REASONABLE PROSPECTS OF EVENTUAL ECONOMIC EXTRACTION

## 14.12.1 OPEN PIT

For the Open Pit Mineral Resource (Table 14-20), a pit limit analysis was undertaken using the LG algorithm in Datamine's NPV Scheduler 4 software to determine physical limits for a pit shell constrained Mineral Resource. The parameters used to generate the pit shell are shown in Table 14-18.

**Table 14-18: Open Pit Limit Analysis Parameters** 

Parameter	Value	
Currency Used for Evaluation	CAD\$	
Block Size	In-Situ model regularized to 2.0 m (x) by 2.0 m (y)	
	by 4.0 m (z)	
Overall Stope Angle	Rock: 45°	
	Overburden: 25°	
	\$5.25/t <sub>mined</sub> Rock	
Open Pit Mining Cost	0.8 MCAF for Overburden	
	+\$0.016/t per 8 m for depths below pit rim	
Process Cost	\$30.00/t <sub>processed</sub>	
Includes assumptions for Milling, G&A	\$30.007 (processed	
Selling Cost	\$5.00/troy ounce	
Includes doré transportation, refinery charges		
Combined Royalty	2.0%	
Percent Payable	99.95%	
	\$1,700 USD per troy ounce	
Metal Price	Exchange Rate: 1 USD\$=1.33 CAD\$	
	\$2,267 CAD/troy ounce (rounded)	
Process Recovery	96.0%	
Pit Shell Selection	RF 1.00	
Production Rate Assumption	2,400 t/d	

Source: Nordmin, 2022

The milling CoG is used to classify the material contained within the pit shell limits as open pit resource material. This break-even CoG is calculated to cover the process and selling costs using the parameters listed in Table 14-18. The Open Pit Mineral Resource CoG is estimated to be 0.44 g/t gold. For resource cut-off calculation purposes, a mining recovery of 100% and mining dilution of 0% was applied. The Open Pit Mineral Resource Estimate is reported from the model regularized to 2 m (x) by 2 m (y) by 4 m (z) to include must take material. The MRE excludes unclassified mineralization located within mined out areas.

#### 14.12.2 UNDERGROUND

For the Underground Mineral Resource (Table 14-20), Minable Shape Optimizer Optimization (MSO) wireframes were created with Deswik.SO version 4 to determine physical limits for a constrained Mineral Resource. The parameters used to generate the MSO wireframes are shown in Table 14-19.

Parameter	Value
Currency Used for Evaluation	CAD\$
Block Size	In-Situ sub-blocked model 2.0 m (x) by 2.0 m (y) by 2.0 m (z)
MSO Geometry	Length: 15 m with 5 m sub-shapes Height: 20 m with 5 m sub-shapes Width: 1 m minimum Dip Angle: 40° minimum
Underground Mining Cost	\$125.00/t <sub>processed</sub>
Process Cost Includes assumptions for Milling, G&A	\$40.00/t <sub>processed</sub>
Selling Cost Includes doré transportation, refinery charges	\$5.00/troy ounce
Combined Royalty	2.0%
Percent Payable	99.95%
Metal Price	\$1,700 USD per troy ounce Exchange Rate: 1 USD\$=1.33 CAD\$ \$2,267 CAD/troy ounce (rounded)
Process Recovery	97%
Production Rate Assumption	1,200 t/d

The Underground Mineral Resource CoG is estimated to be 2.40 g/t gold. This CoG is calculated to cover the Underground Mining, Process and selling costs using the parameters listed in Table 14-19. For resource cut-off calculation purposes, a mining recovery of 100% and mining dilution of 0% was applied. All material within MSO wireframes has been included in the Underground Mineral Resource Estimate to include must take material. The MRE excludes unclassified mineralization located within mined out areas.

## 14.13 MINERAL RESOURCE ESTIMATE

The Mineral Resources were classified using the 2014 CIM Definition Standards and the 2019 CIM Best Practice Guidelines and have an effective date of May 20, 2022. The Project hosts:

- Total Open Pit (at a 0.44 g/t cut-off) and Underground (at a 2.40 g/t cut-off) Mineral Resources include 985.4 thousand tonnes and 162.7 thousand ounces of Indicated Mineral Resources grading 5.14 g/t gold, and 4,185.3 thousand tonnes and 387.6 thousand ounces of Inferred Resources grading 2.88 g/t gold.
- Open Pit Mineral Resources include 653.7 thousand tonnes and 78.0 thousand ounces of Indicated Mineral Resources grading 3.71 g/t gold, and 2,557.4 thousand tonnes and 147.2 thousand ounces of Inferred Resources grading 1.79 g/t gold.

• Underground Mineral Resources include 331.7 thousand tonnes and 84.7 thousand ounces of Indicated Mineral Resources grading 7.94 g/t gold, and 1,628 thousand tonnes and 240.4 thousand ounces of Inferred Resources grading 4.59 g/t gold.

Resource Type	Gold Cut- off (g/t)	Category	Tonnes (x 1,000)	Gold Grade (g/t)	Gold Troy Ounces (x 1,000)
Onon Dit	0.44	Indicated	653.7	3.71	78.0
Open Pit		Inferred	2,557.4	1.79	147.2
Underground	2.40	Indicated	331.7	7.94	84.7
Underground		Inferred	1,628.0	4.59	240.4
Combined Open Pit	•	Indicated	985.4	5.14	162.7
and Underground		Inferred	4,185.3	2.88	387.6

Table 14-20: Mineral Resource Estimate, Open Pit (0.44 g/t Cut-off) and Underground (2.40 g/t Cut-off)

Source: Nordmin, 2022

\* Combined Open Pit and Underground Mineral Resources; The Open Pit Mineral Resource is based on a 0.44 g/t gold CoG, and the Underground Mineral Resource is based on 2.40 g/t gold CoG.

#### **Mineral Resource Estimate Notes**

- Mineral Resources were prepared in accordance with NI 43-101 and the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2019). Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. This estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
- Open Pit Mineral Resources are reported at a CoG of 0.44 g/t gold that is based on a gold price of US\$1,700/oz (approximately CAD\$2,267/oz) and a gold processing recovery factor of 96%.
- Underground Mineral Resource is reported at a CoG of 2.40 g/t gold that is based on a gold price of US\$1,700/oz (approximately CAD\$2,267/oz) and a gold processing recovery factor of 97%.
- Assays were variably capped on a wireframe-by-wireframe basis (Table 14-8 through Table 14-12).
- SG was applied as follows:
  - Mineralized belt Zone wireframes were assigned a weighted average SG of 2.770
  - Low grade background Zone wireframes were assigned a weighted average SG of 2.723
- Mineral Resource effective date May 20, 2022.
- All figures are rounded to reflect the relative accuracy of the estimates and totals may not add correctly.
- Excludes all mined out and unclassified mineralization located within block model.

#### 14.13.1 CAUTIONARY STATEMENT REGARDING MINERAL RESOURCE ESTIMATES

Until mineral deposits are mined and processed, Mineral Resources must be considered as estimates only. Mineral Resource Estimates that are not Mineral Reserves do not have demonstrated economic viability. The estimation of Mineral Resources is inherently uncertain, involves subjective judgment about many relevant factors and may be materially affected by, among other things, environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant risks, uncertainties, contingencies, and other factors described in the foregoing Cautionary Statements. The quantity and grade of reported "Inferred" Mineral Resource Estimates are uncertain in nature and there has been insufficient exploration to define "Inferred" Mineral Resource Estimates as an "Indicated" or "Measured" Mineral Resource and it is uncertain if further exploration will result in upgrading "Inferred" Mineral Resource Estimates to an "Indicated" or "Measured" Mineral Resource category. The accuracy of any Mineral Reserve and Mineral Resource Estimates is a function of the quantity and quality of available data, and of the assumptions made and judgments used in engineering and geological interpretation, which may prove to be unreliable and depend, to a certain extent, upon the analysis of drilling results and statistical inferences that may ultimately prove to be inaccurate. Mineral Reserve and Mineral Resource Estimates may have to be reestimated based on, among other things: (i) fluctuations in mineral prices; (ii) results of drilling, and development; (iii) results of test stoping and other testing; (iv) metallurgical testing and other studies; (v) results of geological and structural modelling including stope design; (vi) proposed mining operations, including dilution; (vii) the evaluation of mine plans subsequent to the date of any estimates; and (viii) the possible failure to receive required permits, licences, and other approvals. It cannot be assumed that all or any part of an "inferred," "Indicated" or "Measured" Mineral Resource Estimate will ever be upgraded to a higher category. The Mineral Resource Estimates disclosed in this news release were reported using CIM Definition Standards for Mineral Resources and Mineral Reserves in accordance with National Instrument 43-101 of the Canadian Securities Administrators.

## 14.14 GRADE DISTRIBUTION BETWEEN HIGH GRADE AND LOW GRADE BACKGROUND ZONES

Open pit constrained resources have been defined as follows: high grade belt material accounts for approximately 96% of pit tonnage, and lower grade background Zone material accounts for approximately 4% of pit tonnage.

## 14.15 MINERAL RESOURCE SENSITIVITY TO REPORTING CUT-OFF

The sensitivity of the MRE to a range of CoGs for each category in the open pit can be found in Table 14-21 and for underground in Table 14-22.

		CoG	Tonnes		Gold
Resource Type	Category	(Au g/t)	(x 1,000)	Au Grade (g/t)	(oz x 1,000)
		0.10	993.4	2.53	80.8
		0.20	857.2	2.90	79.9
		0.30	770.0	3.20	79.2
		0.35	727.3	3.37	78.8
		0.40	683.6	3.57	78.5
		0.44	653.7	3.71	78.0
	Indicated	0.50	615.9	3.91	77.4
		0.60	571.1	4.17	76.6
		0.80	496.0	4.70	74.9
		1.00	444.0	5.14	73.4
		2.00	290.0	7.12	66.4
		3.00	212.2	8.83	60.3
Open Pit		5.00	139.1	11.40	51.0
Open Pit		0.10	6,579.1	0.83	175.6
		0.20	4,468.3	1.15	165.2
		0.30	3,427.6	1.43	157.6
		0.35	3,063.3	1.56	153.6
		0.40	2,774.8	1.68	149.9
		0.44	2,557.4	1.79	147.2
	Inferred	0.50	2,322.5	1.93	144.1
		0.60	2,011.6	2.14	138.4
		0.80	1,565.4	2.55	128.3
		1.00	1,206.3	3.05	118.3
		2.00	570.2	4.91	90.0
		3.00	358.8	6.38	73.6
		5.00	191.1	8.62	53.0

Table 14-21: Mineral Resource Sensitivity to Reporting Cut-off, Open Pit

		CoG	Tonnes		Gold
Resource Type	Category	(Au g/t)	(x 1,000)	Au Grade (g/t)	(oz x 1,000)
		1.0	888.1	4.81	137.4
		1.5	577.3	6.03	112.0
		2.0	409.8	7.16	94.4
		2.2	370.9	7.50	89.4
		2.4	331.7	7.94	84.7
	Indicated	2.6	296.4	8.35	79.5
		2.8	269.9	8.76	76.0
		3.0	247.9	9.04	72.0
		3.5	198.7	9.98	63.7
		4.0	162.6	10.98	57.4
Underground		5.0	104.4	13.43	45.1
Onderground		1.0	5,344.4	2.47	425.0
		1.5	3,188.5	3.31	339.6
		2.0	2,114.6	4.08	277.3
		2.2	1,859.4	4.33	258.8
		2.4	1,628.0	4.59	240.4
	Inferred	2.6	1,412.4	4.88	221.5
		2.8	1,239.5	5.13	204.3
		3.0	1,085.6	5.42	189.3
		3.5	801.4	6.10	157.2
		4.0	626.0	6.73	135.5
		5.0	399.1	8.01	102.8

Table 14-22: Mineral Resource Sensitivity	v to Report	ting Cut-Off.	Underground
	, to hepon		onacigioana

#### 14.16 COMPARISON WITH THE PREVIOUS RESOURCE ESTIMATE

No previous Mineral Resource Estimates exist for the Project.

## 14.17 FACTORS THAT MAY AFFECT THE MINERAL RESOURCES

Areas of uncertainty that may materially impact the MRE include:

- Changes to long term metal price assumptions.
- Changes to the input values for mining, processing, and G&A costs to constrain the estimate.
- Changes to local interpretations of mineralization geometry and continuity of mineralized zones.
- Changes to the density values applied to the mineralized zones.
- Changes to metallurgical recovery assumptions.
- Changes in assumptions of marketability of the final product.
- Variations in geotechnical, hydrogeological, and mining assumptions.
- Changes to assumptions with an existing agreement or new agreements.
- Changes to environmental, permitting, and social licence assumptions.

## 14.18 COMMENTS ON SECTION 14

The QP is not aware of any environmental, legal, title, taxation, socio-economic, marketing, political or other relevant factors that would materially affect the estimation of Mineral Resources that are not discussed in this Technical Report.

The QP is of the opinion that Mineral Resources were estimated using industry accepted practices and conform to the 2014 CIM Definition Standards and 2019 CIM Best Practice Guidelines. Technical and economic parameters and assumptions applied to the MRE are based on Nordmin's internal calculations and feedback from the Company to determine if they were appropriate.

## **15 MINERAL RESERVE ESTIMATE**

## **16 MINING METHODS**

## **17 RECOVERY METHODS**

## **18 PROJECT INFRASTRUCTURE**

The Project contains historical underground workings and surface infrastructure and is currently on care and maintenance. Significant infrastructure remaining on site includes:

- Approximately 5,000 m of underground workings with a vertical depth of 160 m and an east-west extent of approximately 500 m.
- A 300 tonnes per day gravity/flotation mineral processing facility, including a crusher and a grinding mill.
- An assay laboratory, capable of fire assay with gravity finish.
- Core racks.
- A tailings management facility.
- Three-phase, grid-connected power.
- Diesel fuel tank with pump.
- Water wells (non-potable).
- A Quonset-style, steel clad workshop in good condition.
- A security/first aid trailer, mine dry trailer, and several office trailers.

## **19 MARKET STUDIES AND CONTRACTS**

# 20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL, OR COMMUNITY IMPACT

This section is not applicable for this report.

NI 43-101 Technical Report & Mineral Resource Estimate Aureus East Project Aurelius Minerals Inc.

## **21 CAPITAL AND OPERATING COSTS**

## **22 ECONOMIC ANALYSIS**

## **23 ADJACENT PROPERTIES**

The Aureus West project borders the Project immediately to the south and is interpreted to be the western, faulted extension of the Deposit, offset by the HCF. The Aureus West project is owned by the Company. The Company completed a 4,600 m, 10 diamond drill hole HQ program in 2020, with every hole reporting Au mineralization.

Other adjacent properties along trend from the Property are owned as follows and are displayed in Figure 23-1:

- Meguma Gold's Dufferin Gold Project comprises 218 claims of approximately 3,529 Ha (EL 51977, LMEL 52794, LMEL 51733, LMEL 51732, EL 51363).
- Genius Metals Inc. Chocolate Lake comprises 6 claims of approximately 97 Ha (EL 50821).
- Perry T. Bezanson owns 11 claims of approximately 178 Ha (EL51891, EL50789).

None of these properties have any recent exploration or development work reported on them.

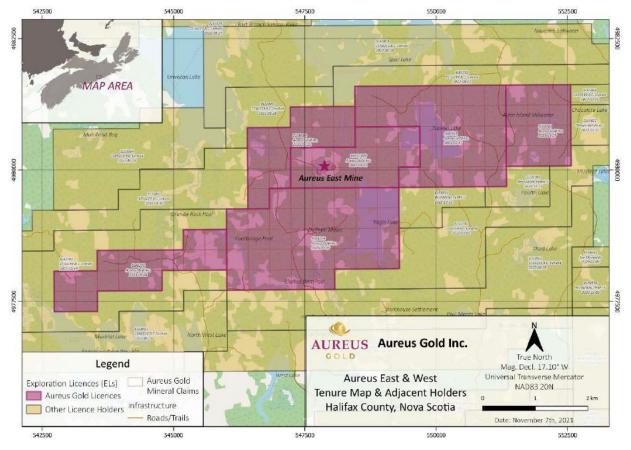


Figure 23-1: Properties Adjacent to Aureus East Deposit

Source: Aurelius Minerals Inc., 2022

## 24 OTHER RELEVANT DATA AND INFORMATION

There is no additional information or explanation necessary to make this technical report understandable and not misleading.

## **25 INTERPRETATIONS AND CONCLUSIONS**

## **25.1 INTRODUCTION**

The QPs note the following interpretations and conclusions in their respective areas of expertise based on the review of data available for this Technical Report.

## 25.2 MINERAL TENURE, SURFACE RIGHTS, ROYALTIES AND AGREEMENTS

The center of the Project is located at approximately 44° 58′ 33″ North Latitude and 62° 22′ 30″ West Longitude on NTS map-sheet 11D/16C. The UTM coordinates are 4,980,500 N and 549,325 E using UTM NAD83 Coordinate Zone 20N. The Project is 1,069 hectares in area and consists of 3 contiguous Exploration Licences and 1 Mineral Lease. The Exploration Licences consist of 52 claims, approximately 40-acre claims for a total of 2,080 acres or 842 ha. The Mineral Lease consists of 14 claims. Surface rights of the Project affected by mining operations are owned by the Company. The portal for the decline lies on Crown land that is leased by Aureus.

There is infrastructure on site that existed when the Company took ownership of the Project. The presence of past infrastructure, underground workings, mill, offices, shops, and ancillary structures, as well as a tailing management facility, are recognized as important environmental site factors. The Project has had IAs issued to previous owners and the Company continues to abide by the criteria set out in the most recent IA where applicable.

## 25.3 GEOLOGY AND MINERAL RESOURCE MODELLING

The bedrock geology of Nova Scotia is divided into the Avalon Terrane to the north and the Meguma Terrane to the south, separated by the east-trending Minas Geofracture (Cobequid-Chedabucto Fault System). The Meguma Terrane is predominantly composed of Cambrian to Lower Devonian sediments and turbiditic metasediments and underlies most of the southern mainland of Nova Scotia. The Meguma group consists of the basal Goldenville Formation and overlying Halifax Formation. The Goldenville consists of massive, thick-bedded dark to light-grey metagreywacke. The greywacke beds represent fining-upward cycles that are commonly capped and separated by thin, slaty units that are chloritic or carbonaceous. The overlying Halifax Group consists of slate and metasiltstone. Slate is the predominant lithology (75%) and is black, carbonaceous and sulphidic. The metasiltstone is cross-laminated and thinly bedded. The upper portion of the Halifax Formation is commonly comprised of grey-green slate and siltstone.

The Project is a typical saddle-reef type turbidite hosted gold deposit, analogous to the Bendigo in Australia. Gold bearing quartz saddle-veins occur within dilation zones within argillite units along the hinge of the fold axis as well as within quartz leg-reef veins. A total of 203 stacked zones have been identified. Saddle-reef veins and associated leg-reef veins have been indicated at the Project through diamond drilling, mapping, and underground mining. While no marker units have been identified, the stratigraphic section was subdivided into a series of units which could be correlated from limb to limb and along strike. The units are classified as:

- Massive greywacke with little or no argillite
- Interbedded silty-greywacke and argillite
- Argillite

- Argillite Beds with minor amounts of Greywacke
- Bedding parallel quartz veins, which typically occur within argillite beds
- Cross Cutting quartz veins

There are four significant faults on the Project that offset the Crown Reserve Anticline. These faults are referred to as Wedge, Refuge, Decline, and Raise Faults from west to east respectively. The Wedge and Decline Faults trend NW-SE, subparallel to the HCF, whereas the Refuge and Raise Faults trend generally N-S. The Crown Reserve Anticline is a tight chevron-style fold, steeply inclined to the south, the hinge zone of which is a rounded arc-shaped structure 5 to 10 m across. The limbs (leg-reef veins) are uniform and straight. Near surface, the south limb has a dip of approximately 65° and the dip of the north limb averages 78°.

Throughout the Meguma Terrane and within the Aureus East deposit gold mineralization is largely associated with the Goldenville Formation, within and adjacent to quartz veins. These quartz veins are better developed in argillite or slate and their equivalent schist than in the more competent greywacke and quartzite strata. Gold bearing quartz saddle-veins occur within dilation zones within argillite units along the hinge of the fold axis as well as within quartz leg reef veins primarily on the steeper dipping north limbs. The most common forms of gold mineralization are as free gold in fine films near crack-seal laminae, along vein-wall contacts, as coarse-grained aggregates in white quartz, within sericitic fractures and within quartz veins with up to 5% silver. Gold is also observed to be attached to sulphides such as galena and arsenopyrite. Common gangue minerals within the quartz veins include ankerite, siderite, calcite, kaolinite and chlorite. Associated sulphide minerals, in order of increasing abundance, include arsenopyrite, pyrite, galena, sphalerite, chalcopyrite, pyrrhotite and stibnite. Gold most commonly occurs with galena and arsenopyrite with galena being the best indicator for gold. Arsenopyrite, up to a few percent relative abundance, occurs within veins and the wall rocks.

Greywacke within the Project is commonly silicified and iron carbonate altered. Strong or intense silicification is recognized as an overprinting texture which has recrystallized and destroyed the original sedimentary texture. Bleaching is also common in areas of intense silicification. Argillite is softer and more brittle than the greywacke and typically presents with biotite, graphite, and sericite alteration.

The Maiden MRE for the Project follows a two-phase drilling program, consisting of 21,082 m of diamond drilling, completed from 2020 to 2022 which intersected gold intervals in all 49 holes within the first 500 m. The MRE was estimated from the main drill hole database comprised of 43,571 m of diamond drilling from 229 drill holes completed between 1987 and the effective date of May 20, 2022. An additional 48 channel samples cross-cutting mineralization within historic developments was completed in 2021 which assisted in confirming and refining the mineralogical, lithological, and structural controls of the Project.

To model the complex geometry of the mineralized Zones detailed implicit wireframing was completed using Leapfrog Geo<sup>™</sup>. A low-grade background wireframe was created for each of the five Domains which were truncated by the four major faults transecting the Project. This wireframing was reviewed by Nordmin to confirm geological reasoning and to verify the wireframes. Assays were manually flagged to wireframes to ensure no assays were overlooked and that appropriate grade was assigned to the individual mineralized zones.

## **25.4** EXPLORATION, DRILLING, AND ANALYTICAL DATA COLLECTION IN SUPPORT OF MINERAL RESOURCE ESTIMATION

The exploration programs completed by the Company and previous operators are appropriate for this deposit style. The programs have delineated the stacked gold bearing saddles. 2020-2022 drilling programs have effectively identified future exploration targets.

The quantity and quality of the lithological, collar, and downhole survey data collected in the various exploration programs by various operators are sufficient to support the MRE. The collected sampling is representative of gold and corresponding ICP data in the Project, reflecting areas of higher and lower grades. The analytical laboratories used for legacy and current assaying are well known in the industry, produce reliable data, are properly accredited, and are widely used in the industry.

Nordmin is not aware of any drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the results. In Nordmin's opinion, the drilling, core handling, logging, and sampling procedures meet or exceed industry standards, and are adequate for the purpose of mineral resource estimation.

Nordmin considers the QA/QC protocols in place for the Project to be acceptable and in line with standard industry practice. Based on the data validation and the results of the standard, blank, and duplicate analyses, Nordmin is of the opinion that the assay and bulk density databases are of sufficient quality for the MRE for the Project.

## **25.5 METALLURGICAL TESTWORK**

No metallurgical test work has been completed by the Company.

## **25.6 MINERAL RESOURCE ESTIMATE**

The MRE for the Project conforms to industry best practices and is reported using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves and 2019 CIM Best Practice Guidelines. Mineral Resources that are not Mineral Reserves do no have demonstrated economic viability. This estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.

Mineral Resources were classified into Measured, Indicated, and Inferred Resource categories based on geological and grade continuity, in conjunction with data quality, spatial continuity based on variography, estimation pass, data density, and block model representativeness, specifically assay spacing and abundance, kriging variance, and search volume block estimation assignment.

The MRE has been defined based on an applied gold g/t CoG to reflect processing methodology and assumed revenue stream from gold. The MRE is based on 43,571 m of diamond drilling from 229 drill hole from both surface and underground from 1987 to the effective date of May 20, 2022, as well as an additional 48 channel samples totalling 142.14 m taken in 2021.

The Project hosts:

• Total Open Pit (at a 0.44 g/t cut-off) and Underground (at a 2.4 g/t cut-off) Mineral Resources include 985.4 thousand tonnes and 162.7 thousand ounces of Indicated Mineral Resources

grading 5.14 g/t gold, and 4,185.3 thousand tonnes and 387.6 thousand ounces of Inferred Resources grading 2.88 g/t gold.

- Open Pit Mineral Resources include 653.7 thousand tonnes and 78.0 thousand ounces of Indicated Mineral Resources grading 3.71 g/t gold, and 2,557.4 thousand tonnes and 147.2 thousand ounces of Inferred Resources grading 1.79 g/t gold.
- Underground Mineral Resources include 331.7 thousand tonnes and 84.7 thousand ounces of Indicated Mineral Resources grading 7.94 g/t gold, and 1,628 thousand tonnes and 240.4 thousand ounces of Inferred Resources grading 4.59 g/t gold.

There is potential for an increase in the estimate if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories and if any categorized mineralization within the Project can be expanded.

## **25.7 RISKS AND UNCERTAINTIES**

There are risks that are inherent to a mining project. Areas of uncertainty that may materially impact the MRE include:

- Changes to long term metal price assumptions.
- Changes to the input values for mining, processing, and general and administrative costs to constrain the estimate.
- Changes to local interpretations of mineralization geometry and continuity of mineralized zones.
- Changes to the density values applied to the mineralized zones.
- Changes to metallurgical recovery assumptions.
- Changes in assumptions of marketability of the final product.
- Variations in geotechnical, hydrogeological, and mining assumptions.
- Changes to assumptions with an existing agreement or new agreements.
- Changes to environmental, permitting, and social license assumptions.
- EA Timing, requirements and supporting documentation.
- The assumption that the electric power line will be available on time for the construction of the project.
- Discussions with various First Nation and Indigenous communities.
- Logistics of securing and moving adequate services, labour and supplies could be affected by epidemics, pandemics, and other public health crises, including COVID-19 or similar such viruses.

## **25.8 CONCLUSIONS**

The results of this technical report indicate that the Project has technical merit based on the inputs from data obtained by previous operators. The Company plans on progressing its drill programs to build off results from its recently completed Phase 1 and 2 with goals to further delineate economic resources and upgrade inferred to indicated.

## **26 RECOMMENDATIONS**

The QP recommends a two-phase approach as follows.

## **26.1 PHASE 1 RECOMMENDATIONS**

The author recommends continued drilling in the optimized pit area at Aureus East for the purpose of existing drill spacing in-fill, testing areas with potential for additional mineralized limbs, and drilling transition areas from fold hinges to limbs. This would require 60 to 70 holes at shorter depths to target the bottom of the optimized pit area. The Company should continue to sample all remaining historical core that was drilled in the optimized pit area. The Company is completing underground channel sampling and have been successful at identifying shorter-range mineralization continuity. While there are no future plans to continue underground channel sampling or drilling, efforts must continue to focus on improving hinge/limb mineralization continuity through surface drilling. Table 26-1 contains estimated costing for this exploration work; these costs include a 15% contingency.

Phase 2 is not contingent on results from Phase 1, but the decision point for Phase 1 is where Phase 2 should be targeted.

## 26.2 PHASE 2 RECOMMENDATIONS

Phase 2 recommendations are contingent upon completion of the Phase 1 recommendations and the receipt of positive economic results from the Phase 1 program. The Phase 2 program is designed for the further advancement of the ongoing drilling and technical programs.

Phase 2 should consist of additional drilling, including deeper drilling target extensions of higher grade areas below the optimized pit. Some areas have already been identified, but additional areas may be identified nearer to surface during Phase 1 drilling.

Table 26-1 contains estimated costing for this exploration work. These costs include a 15% contingency.

## 26.3 Costs

Costing for Phase 1 and Phase 2 recommendations can be found in Table 26-1. These costs include a 15% contingency.

Table 26-1: Recommended Phase 1 and 2 Programs with Estimated Costs (with 15% contingency)

Phase	Item Description		Total (\$CAD)
	Drilling	Holes within optimized pit area	3,000,000
Phase 1	Relogging/resampling of historical drill core	Verification and supplementation of geological data; sampling within pit area	500,000
	Phase 1 Subtotal		3,550,000
Dhasa 2	Drilling	Additional drilling to target below pit area	3,000,000
Phase 2	Phase 2 Subtotal		3,000,000
All Phases	Total		6,550,000

## **26.4 Additional Recommendations**

The following recommendations are also suggested. These consist of minimal-cost items and should occur wherever and whenever possible.

- Additional structural measurements should be taken, including (but not limited to) oriented core and/or downhole optical televiewer measurements for the purpose of the continuing refinement of fault and fold modelling.
- The current QA/QC program should be continued.
- Future assay programs should include a higher level of ICP data, as well as inclusion of whole rock data.
- Continuation of field mapping and sampling where outcrop is accessible.

## **27 REFERENCES**

- Cardona, A., Montes, C., Ayala, C., Bustamante, C., Hoyos, N., Montenegro, O., Ojeda, C., Niño, H., Ramirez, V., Valencia, V. and Rincón, D., 2012. From arc-continent collision to continuous convergence, clues from Paleogene conglomerates along the southern Caribbean–South America plate boundary. Tectonophysics, 580, **pp.58-87**.
- Duncan, D. R. 1999. Report on the 1999 Drilling Program Dufferin Property Halifax County, Nova Scotia. Internal Draft Report.
- Ryan, R.J. and Smith, P.K. 1998. A review of the mesothermal gold deposits of the Meguma Group, Nova Scotia, Canada. Ore Geology Reviews v. 13, (1988) **pp 153--183**.
- Zalnieriunas, R.V. 1997. Geological Review of the Mooseland Gold Project, Halifax County, Nova Scotia, Globex Mining Enterprises Inc., January 20, 1997, **p 34**.

## **28 GLOSSARY**

The Mineral Resources and Mineral Reserves have been classified according to CIM (CIM, 2014). Accordingly, the resources have been classified as Measured, Indicated, or Inferred, the reserves have been classified as proven, and probable based on the Measured and Indicated Mineral Resources as defined below.

#### **28.1 MINERAL RESOURCE**

A **Mineral Resource** is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade, or quality, and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, or quality, continuity, and other geological characteristics of a Mineral Resource are known, estimated, or interpreted from specific geological evidence and knowledge, including sampling.

An **Inferred Mineral Resource** is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An **Indicated Mineral Resource** is that part of a Mineral Resource for which quantity, grade, or quality, densities, shape, and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the Project. Geological evidence is derived from the adequately detailed and reliable exploration, sampling, and testing, and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

A **Measured Mineral Resource** is that part of a Mineral Resource for which quantity, grade, or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the Project. Geological evidence is derived from the detailed and reliable exploration, sampling, and testing, and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

## 28.2 MINERAL RESERVE

A **Mineral Reserve** is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at prefeasibility or feasibility level as appropriate that include the application of modifying factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is

different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a Mineral Reserve must be demonstrated by a prefeasibility study or feasibility study.

A **Probable Mineral Reserve** is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the modifying factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.

A **Proven Mineral Reserve** is the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the modifying factors.

## **28.3 DEFINITION OF TERMS**

Term	Definition
Assay	The chemical analysis of mineral samples to determine the metal content.
Capital Expenditure	All other expenditures not classified as operating costs.
Composite	Combining more than one sample result to give an average result over a larger distance.
Concentrate	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore.
Crushing	The initial process of reducing the ore particle size to render it more amenable for further processing.
Cut-Off Grade	The grade of mineralized rock, which determines as to whether or not it is economical to recover its gold content by further concentration.
Dilution	Waste, which is unavoidably mined with ore.
Dip	The angle of inclination of a geological feature/rock from the horizontal.
Fault	The surface of a fracture along which movement has occurred.
Footwall	The underlying side of an orebody or stope.
Gangue	Non valuable components of the ore.
Grade	The measure of the concentration of gold within the mineralized rock.
Hanging wall	The overlying side of an orebody or slope.
Haulage	A horizontal underground excavation which is used to transport mined ore.
Hydrocyclone	A process whereby material is graded according to size by exploiting centrifugal forces of particulate materials.
Igneous	Primary crystalline rock formed by the solidification of magma.
Kriging	An interpolation method of assigning values from samples to blocks that minimize the estimation error.
Level	A horizontal tunnel, the primary purpose is the transportation of personnel and materials.
Lithological	Geological description pertaining to different rock types.
LRP	Long Range Plan
Material Properties	Mine properties.

The following terms may be used in this Technical Report.

hed and he ng mine. ed by
ng I mine.
mine.
mine.
mine.
mine.
ed by
cu by
nnel,
iner,
k formed
k luineu
nace, in
se and
ense
ense
es with
ave been

## 28.4 ABBREVIATIONS, ACRONYMS, AND SYMBOLS

The following abbreviations, acronyms, and symbols may be used in this Technical Report.

Abbreviation/Acronym/Symbol	Term
%	percent
<	less than
>	greater than
°	degree (degrees)
°C	degrees Celsius
μm	micrometre or micron
AA	atomic absorption
AAS	Atomic absorption spectrometry

Abbreviation/Acronym/Symbol	Term
ACO	Average Copper Ore
ADR	Adsorption, Desorption and Recovery
ADT	Articulated dump trucks
AG	Acid Generating
Ag	silver
AISC	all-in sustaining cost
AP	Acid Potential
ARD	acid rock drainage
Au	gold
ВАТ	best available techniques
BBWI	Bond Ball Work Index
BG	Background Grade
внем	Borehole Electromagnetic
BIF	banded-iron formation
ВМА	Bulk Mineral Analyses
BML	Base Metallurgical Laboratories
BMP	best management practices
воо	built, owned, and operated
Сарех	capital expenditure
ССМЕ	Canadian Council of Ministers of the Environment
CD	Contact Water ditches
CGSZ	Central Guiana Shear Zone
CIF	Cost, insurance, and freight
CIL	carbon in leach
СІМ	Canadian Institute of Mining, Metallurgy, and Petroleum
CIP	carbon in pulp
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
cm	centimetre
СМС	Carboxy Methyl Cellulose
CND	Cyanide destruction
CNP	determination of cyanide
CoG	Cut-off grade
СРВ	Cemented paste backfill
CRM	certified reference material

Abbreviation/Acronym/Symbol	Term
DDH	diamond drill hole
DGPS	differential global positioning system
EIA	Environmental Impact Assessment
ELOS	Equivalent Linear Overbreak/Slough
EM	electromagnetic
EMPA	electron microprobe analysis
EPA	Environmental Protection Agency
EPC	Engineering, procurement and construction
ESMS	Environmental and Social Management System
ETZ	Equatorial Trough Zone
FA	Fire Assay
FAR	Fresh air raises
FDC	Fuel Distribution Company
FoS	Factor of Safety
FOT	Free on Truck
ft	foot (feet)
ft <sup>2</sup>	square foot (feet)
ft <sup>3</sup>	cubic foot (feet)
g	gram
G&A	General & Administrative
g/cm <sup>3</sup>	grams per cubic centimetre
g/L	gram per litre
g/t	grams per tonne
Ga	giga-annum (1 billion years)
gal	gallon
GCM Mining or the Company	GCM Mining Corp.
GEMS	GEOVIA GEMS™
GFC	Guyana Forestry Commission
GGMC	Guyana Geology and Mining Commission
g-mol	gram-mole
gpm	gallons per minute
GPS	global positioning system
ha	hectare (10,000 m <sup>2</sup> )
HCF	Harrigan Cove Fault
НСТ	humidity cell testing

Abbreviation/Acronym/Symbol	Term
НМС	heavy mineral concentrate
HPGR	high pressure grinding roll
HSE	Health Safety and Environmental
HW	Hanging wall
ICMC	International Cyanide Management Code
ICP	induced couple plasma
ICP-AES	inductively coupled plasma atomic emission spectrometry
ID2	inverse distance squared
ID3	inverse distance cubed
IFC	International Finance Corporation
IFO	intermediate fuel oil
IP	induced polarization
IPP	independent power producer
IRR	internal rate of return
ISR	inductive source resistivity
ITCZ	Inter Tropical Convergence Zone
ІТН	In-the-hole
IUCN	International Union for Conservation of Nature
КСВ	Klohn Crippen Berger
kg	kilogram
km	kilometre
km <sup>2</sup>	square kilometre
KRHP	Kumarau River Hydroelectric Project
kt	thousand tonnes
KV	kriging variance
L	litre
lb	pound
LCO	Low Copper Ore
LCT	Locked cycle test
LG	Low-Grade
LHOS	Longhole open stoping
LIDAR	light detection and ranging
LoM	Life of mine
m	metre
М	million

Abbreviation/Acronym/Symbol	Term
МА	Mechanical availability
Ма	mega annum (1 million years)
mbgs	metres below ground surface
МСС	motor control centres
MG	Medium Grade
mg/L	milligrams/litre
MgO	magnesium oxide
MIBC	methyl isobutyl carbinol
ML	Metal leaching
mm	millimetre
mm <sup>2</sup>	square millimetre
mm <sup>3</sup>	cubic millimetre
MMR	magnetometric resistivity
MOU	Memorandum of Understanding
Moz	million troy ounces
MP	Mining Permits
MSHA	Mine Safety and Health Administration
MSO	Mineable Shape Optimizer
Mt	million tonnes
MT	magnetotelluric
Mtpa	million tonnes per annum
NAG	net acid generation
NCD	non-contact water ditches
NI 43-101	Canadian National Instrument 43-101
NN	Nearest neighbour
NNW	north-northwest
NP	Neutralization Potential
NPAG	not-potentially acid generating
NPR	Net Potential Ratio
NS	north-south
ОК	ordinary kriging
Орех	operating expenditures
OZ	troy ounce
РАХ	Potassium Amyl Xanthate
Pb	lead

Abbreviation/Acronym/Symbol	Term
PCOC	Potential Constituent of Concern
PEA	Preliminary Economic Assessment
PFS	Prefeasibility Study
PIMS	protocol independent multicasts
PL	Prospecting Licenses
PMA	particle mineral analysis
PMF	probable maximum flood
РМРА	Precious metal purchase agreement
PoF	Probability of Failure
POI	point of interconnection
РРА	power purchase agreement
ppb	parts per billion
ppm	parts per million
PPMS	Prospecting Permits Medium Scale
PSA	Pressure swing adsorption
QA	quality assurance
QC	quality control
QP	QPs
RAR	return air raises
RC	reverse circulation
RF	revenue factor
RMR	Rock Mass Rating
RoM	run of mine
RQD	rock quality designation
S	sulphur
SAG	semi-autogenous grinding
SC	spatial composites
SEC	Securities and Exchange Commission
SEDAR	System for Electronic Document Analysis and Retrieval
SFE	Shake Flask Extraction
SG	specific gravity
SI	Saprolite Intrusives
SI	saprolite intrusives
SIMS	secondary ion mass spectrometer
SMC	SAG mill comminution

Abbreviation/Acronym/Symbol	Term
SSE	south-southeast
SV	saprolite volcanics
t	tonne (metric ton) (2,204.6 pounds)
t/h	tonnes per hour
TML	Transportable moisture limit
тмѕ	trace mineral search
tpd	tonnes per day
TSF	tailings storage facility
UC	Uncertain
UCS	Unconfined Compressive Strength
US	United States
UTM	Universal Transverse Mercator
VAT	Value Added Tax
VG	visible gold
VS	volcano-sedimentary
VSA	Vacation, sickness and absence
WAD	weak acid dissociable
WHO	World Health Organization
WMS	water management structures

**Appendix A: QP Certificates of Authors** 



#### CERTIFICATE OF QUALIFIED PERSON

I, Christian Ballard, P. Geo., of Thunder Bay, Ontario do hereby certify:

- 1. I am a Senior Geologist with Nordmin Engineering Ltd. with a business address at 160 Logan Ave., Thunder Bay, Ontario, Canada, P7A 6R1.
- 2. This certificate applies to the technical report titled "NI 43-101 Technical Report and Mineral Resource Estimate for the Aureus East Project, Nova Scotia, Canada" with an Effective Date of July 11, 2022 (the "Technical Report").
- 3. I am a graduate of the University of Saskatchewan, 2002 with a Bachelor of Science in Geology.
- 4. I am a member in good standing with the Association of Professional Geoscientists of Ontario and registered as a Professional Geoscientist, license number 3025.
- My relevant experience includes 18 years of experience in operations, exploration, and resource estimation. I am a "Qualified Person" for the purposes of Canadian National Instrument 43-101

   Standards of Disclosure for Mineral Projects ("NI 43-101" or the "Instrument").
- 6. My most recent personal inspection of the Aureus East Project (the "Project"), located in Nova Scotia, Canada, was June 21<sup>st</sup> and June 22<sup>nd</sup>, 2022.
- 7. I am responsible for Sections 1 through 28 (the "Relevant Sections") within the Technical Report.
- 8. I am independent of Aurelius Minerals Inc. as defined in Section 1.5 of the Instrument.
- 9. I have read the Instrument and the Technical Report which has been prepared in compliance with the Instrument.
- 10. As of the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 11. I have no prior involvement with the Project that is the subject of the Technical Report.

Signed and dated this 11<sup>th</sup> day of July, 2022, at Thunder Bay, Ontario.

(signed and sealed)

Christian Ballard, P.Geo. Senior Geologist Nordmin Engineering Ltd.